LiNC-ID

LiNC-NET Video Badging Software

Installation and User Manual

33-10042-001
REV: C

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First Edition: January 2000

Revision B: January 2000

Revision C: April 2000

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Printed in the United States of America.

Published by PCSC
18528 Dominguez Hills Drive
Rancho Dominguez, CA 90220-6436
(310) 638-0400
Publication Number: 33-10038-001

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Introduction

PCSC has recently developed **LiNC-NET for Windows** to incorporate photo-imaging and badge-making capabilities. We have named this new feature **LiNC-ID**. **LiNC-ID** allows you to design the look of your company's badges, photograph your employees using digital image technology, and use those images both for personalized employee badges and for access control, all within the LiNC-NET program.

We've designed this appendix to show you how to access **LiNC-ID** through **LiNC-NET**, establish the parameters of your system, create digital employee images, and use those images for access control.

Installing the LiNC-ID Components

Using LiNC-ID with your LiNC-NET system requires a few additional pieces of equipment

System Requirements-

- Pentium II computer with a minimum of 128 Megs of RAM
- Video Capture camera
- PCI Video-Capture Card compatible with Windows NT/2000

⇨ **NOTE**	Testing has shown that installing a capture card separate from a computer card may hamper LiNC-ID photo-imaging ability. Use of a combination video-capture card allows proper function.

Installation of the Video Card, Camera and Video Software

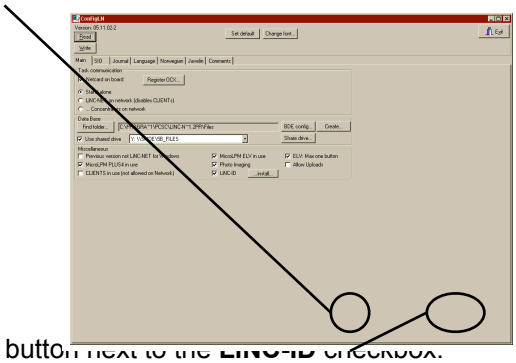
Follow the manufacturer's instruction on the proper installation of the video hardware and software.

Setting Up LiNC-ID

Setting up LiNC-ID to function with LiNC-NET is a simple process.

1. Go to your **Windows® Start** menu and open **ConFigLN**.

2. In the **Miscellaneous** section on the **Main** page of **ConFigLN**, check **[☒]** the box next to **LiNC-ID.**



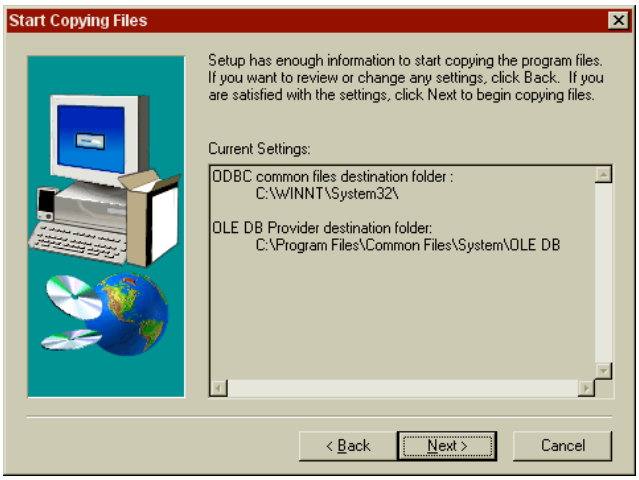
3. Click on the **Install** button next to the **LiNC-ID** checkbox.

4. A LiNC-ID Installation Screen will appear. On the bottom left-hand corner, there are three buttons: **ODBC**, **DAO**, and **SDK**. Click on the **ODBC** button.

5. The InstallShield® Wizard will be invoked through the installation of the **ODBC**. The **Welcome** screen will appear, requesting that you shut down any programs. DO NOT SHUT DOWN **ConFigLN**! Click on the **Next** button.

Welcome
Welcome to the ODBC 3.51 Setup program. This program will install ODBC 3.51 on your computer.
It is strongly recommended that you exit all Windows programs before running this Setup program.
Click Cancel to quit Setup and then close any programs you have running. Click Next to continue with the Setup program.
WARNING: This program is protected by copyright law and international treaties.
Unauthorized reproduction or distribution of this program, or any portion of it, may result in severe civil and criminal penalties, and will be prosecuted to the maximum extent possible under law.
Next >
Cancel

6. The **Start Copying Files** screen will appear. Click on the **Next** button.


Start Copying Files
Setup has enough information to start copying the program files. If you want to review or change any settings, click Back. If you are satisfied with the settings, click Next to begin copying files.
Current Settings:
ODBC common files destination folder :
C:\WINNT\System32\
OLE DB Provider destination folder:
C:\Program Files\Common Files\System\OLE DB
< Back
Next >
Cancel

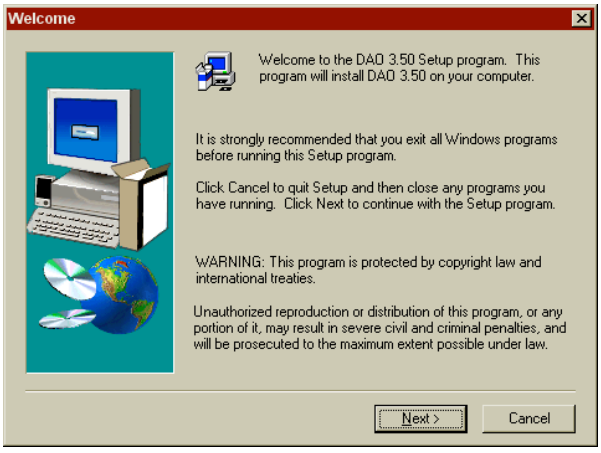
7. The **Setup Complete** screen will appear. The screen will prompt you to restart your computer. DO NOT RESTART YOUR COMPUTER. Mark the button next to **No, I will restart my computer later**. Click the **Finish** button.

Setup Complete
Setup has finished copying files to your computer.
Before you can use the program, you must restart Windows or your computer.
Yes, I want to restart my computer now.
No, I will restart my computer later.
Remove any disks from their drives, and then click Finish to complete setup.
< Back
Finish

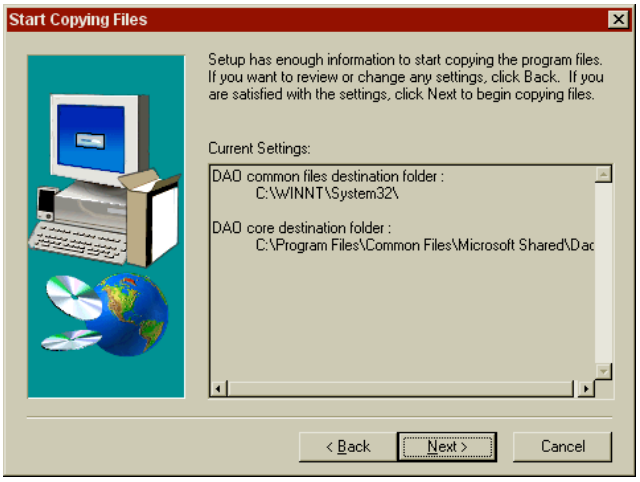
8. You will be brought back to the **LINC-ID Installation** screen. Click on the **DAO** button.

9. This will the start the **InstallShield® Wizard** once more. The installation of the **DAO** is very similar to the installation of **ODBC**.

10. The **Welcome** screen will appear, requesting that you shut down any programs. DO NOT SHUT DOWN **ConFigLN**. Click on the **Next** button.


Welcome
Welcome to the DAO 3.50 Setup program. This program will install DAO 3.50 on your computer.
It is strongly recommended that you exit all Windows programs before running this Setup program.
Click Cancel to quit Setup and then close any programs you have running. Click Next to continue with the Setup program.
WARNING: This program is protected by copyright law and international treaties.
Unauthorized reproduction or distribution of this program, or any portion of it, may result in severe civil and criminal penalties, and will be prosecuted to the maximum extent possible under law.
Next >
Cancel

11. The **Start Copying Files** screen will appear. Click on the **Next** button.


Start Copying Files
Setup has enough information to start copying the program files. If you want to review or change any settings, click Back. If you are satisfied with the settings, click Next to begin copying files.
Current Settings:
DAO common files destination folder :
C:\WINNT\System32\
DAO core destination folder :
C:\Program Files\Common Files\Microsoft Shared\Dac
< Back
Next >
Cancel

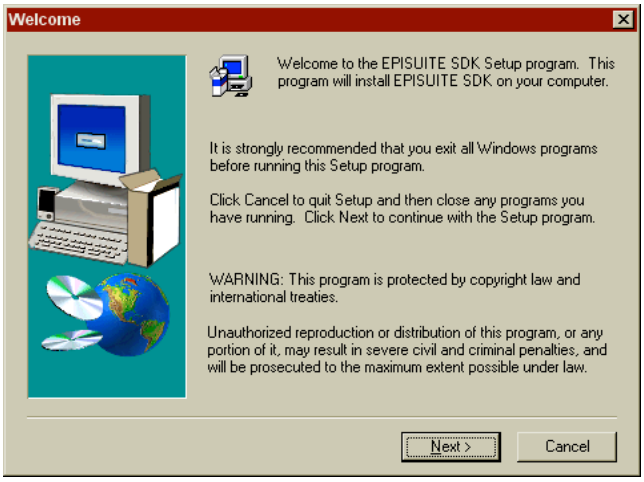
12. The **Setup Complete** screen will appear. The screen will prompt you to restart your computer. DO NOT RESTART YOUR COMPUTER. Mark the button next to **No, I will restart my computer later**. Click the **Finish** button.

Setup Complete
Setup has finished copying files to your computer.
Before you can use the program, you must restart Windows or your computer.
Yes, I want to restart my computer now.
No, I will restart my computer later.
Remove any disks from their drives, and then click Finish to complete setup.
< Back
Finish

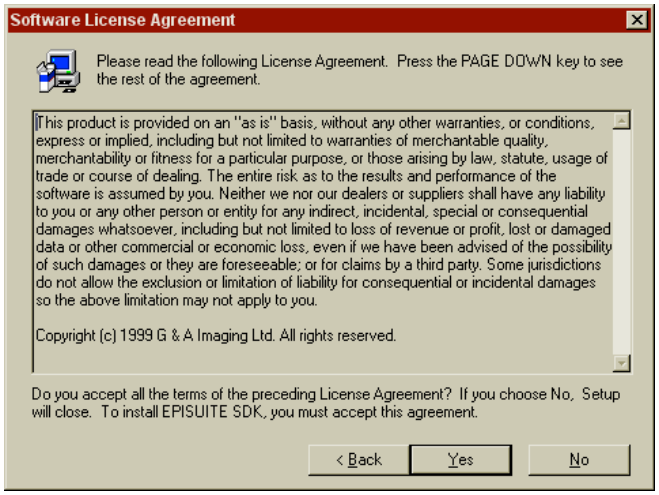
13. This will bring you back the **LiNC-ID Installation** screen. Click on the **SDK** button

14. The **InstallShield® Wizard** will start once more. The installation of the **SDK** is very similar to the installation of **ODBC** and **SDK**.

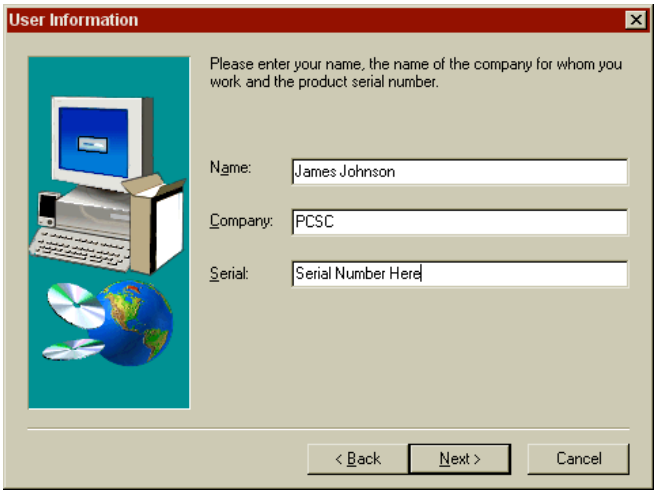
15. The **Welcome** screen will appear, requesting that you shut down any programs. DO NOT SHUT DOWN **ConFigLN**. Click on the **Next** button.


Welcome
Welcome to the EPISUITE SDK Setup program. This program will install EPISUITE SDK on your computer.
It is strongly recommended that you exit all Windows programs before running this Setup program.
Click Cancel to quit Setup and then close any programs you have running. Click Next to continue with the Setup program.
WARNING: This program is protected by copyright law and international treaties.
Unauthorized reproduction or distribution of this program, or any portion of it, may result in severe civil and criminal penalties, and will be prosecuted to the maximum extent possible under law.
Next >
Cancel

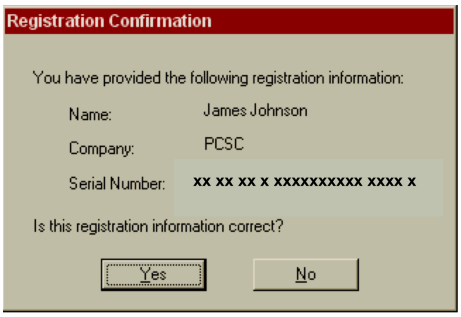
16. The **Software License Agreement** will appear. Click **Yes**.


Software License Agreement
Please read the following License Agreement. Press the PAGE DOWN key to see the rest of the agreement.
This product is provided on an "as is" basis, without any other warranties, or conditions, express or implied, including but not limited to warranties of merchantable quality, merchantability or fitness for a particular purpose, or those arising by law, statute, usage of trade or course of dealing. The entire risk as to the results and performance of the software is assumed by you. Neither we nor our dealers or suppliers shall have any liability to you or any other person or entity for any indirect, incidental, special or consequential damages whatsoever, including but not limited to loss of revenue or profit, lost or damaged data or other commercial or economic loss, even if we have been advised of the possibility of such damages or they are foreseeable; or for claims by a third party. Some jurisdictions do not allow the exclusion or limitation of liability for consequential or incidental damages so the above limitation may not apply to you.
Copyright (c) 1999 G & A Imaging Ltd. All rights reserved.
Do you accept all the terms of the preceding License Agreement? If you choose No, Setup will close. To install EPISUITE SDK, you must accept this agreement.
< Back
Yes
No

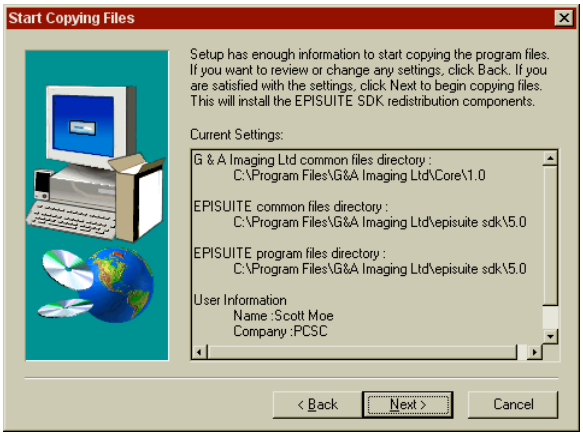
17. The **User Information** screen will appear. Fill in the appropriate Name and Company. The serial number licensed to PCSC should automatically appear in this screen without needing to install it.



18. After filling out the User Information screen, a **Registration Confirmation** screen will appear. If the information is correct, click **Yes**. If it is not, clicking **No** will bring you back to the **User Information** screen.



19. The **Start Copying Files** screen will appear prior to installing the SDK program. Click on the **Next>** button. The program will install on your hard drive.


Start Copying Files
Setup has enough information to start copying the program files. If you want to review or change any settings, click Back. If you are satisfied with the settings, click Next to begin copying files. This will install the EPISUITE SDK redistribution components.
Current Settings:
G & A Imaging Ltd common files directory :
C:\Program Files\G&A Imaging Ltd\Core\1.0
EPISUITE common files directory :
C:\Program Files\G&A Imaging Ltd\episuite sdk\5.0
EPISUITE program files directory :
C:\Program Files\G&A Imaging Ltd\episuite sdk\5.0
User Information
Name :Scott Moe
Company :PCSC
< Back
Next >
Cancel

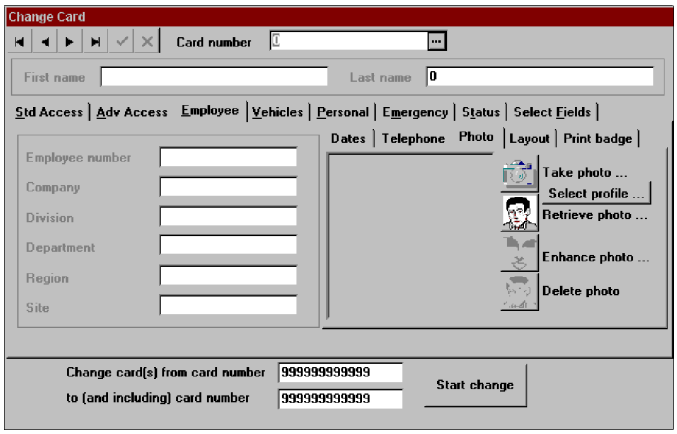
20. After the programs have finished installing, the **Setup Complete** screen will appear. You must change the selection to **No, I will restart my computer later**. Click on the **Finish** button.

Setup Complete
Setup has finished copying files to your computer.
Before you can use the program, you must restart Windows or your computer.
Yes, I want to restart my computer now.
No, I will restart my computer later.
Remove any disks from their drives, and then click Finish to complete setup.
< Back
Finish

21. In the upper right-hand corner of **ConFigLN**, click on the **Write** button to save any changes you have made and then on the **Exit** button (top right-hand corner- not shown).

LiNC-ID- Administrator Functions-Taking Photos

LiNC-ID functions in several ways throughout LiNC-NET. In the **System** side of LiNC-NET, LiNC-ID allows you to collect photos of employees both for the use of the LiNC-ID badge-making process and for visual identification in the use of access control.



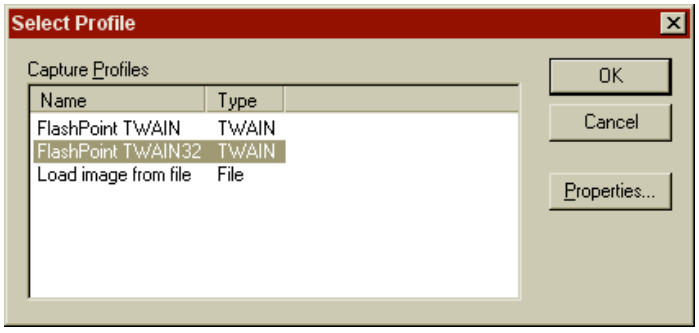
Collecting Photos for Your System

LiNC-ID allows you to take photos of your employees and use them both in the creation of personalized badges and for use in LiNC-NET's Phototrace and Solicit Open features.

1. Open LiNC-NET-Systems Menu
2. Click on the Change Card icon to open the appropriate page.
3. Click on the Employee tab
4. On the right portion of the Employee tab is a box with five tabs: **Dates, Telephone, Photo, Layout,** and **Print Badges**. Select the **Photo** tab.

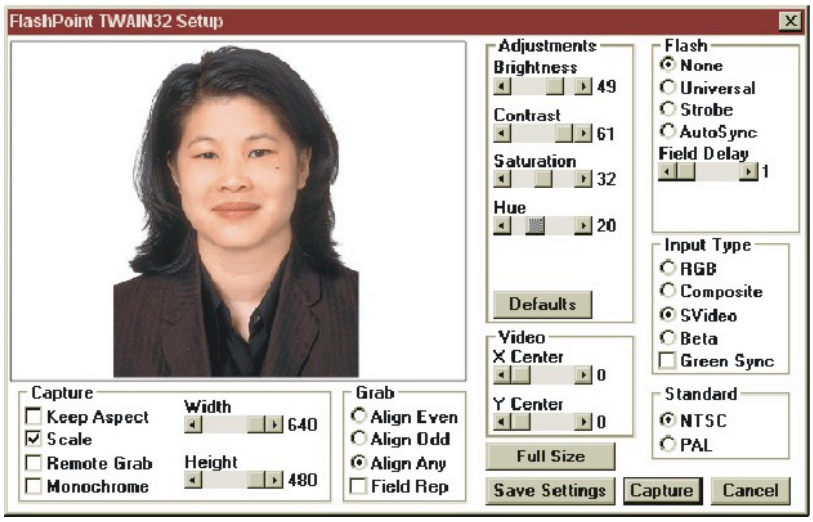
Select Profile- You'll need to select the capture card that you will be using for taking photos.

5. Click the **Select Profile** button. The following window will appear.



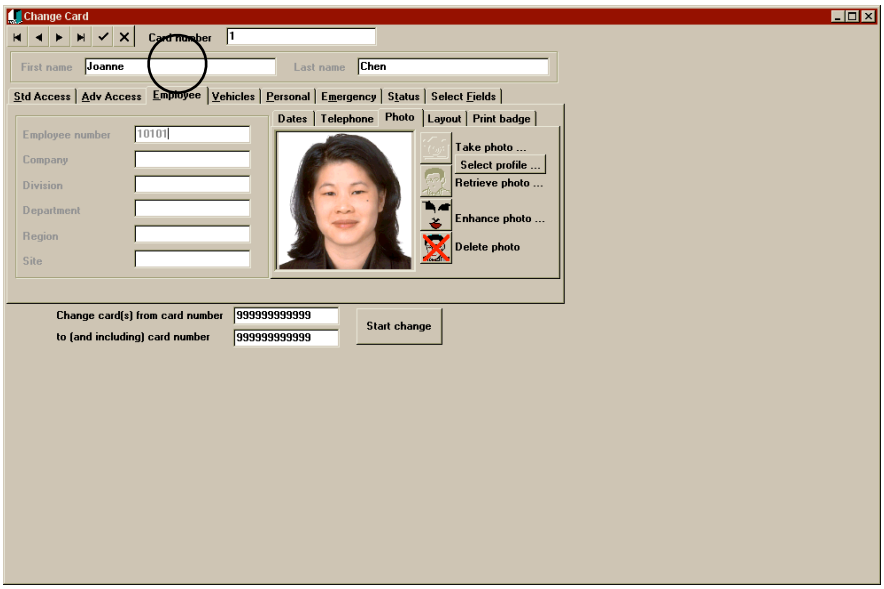
6. You will need to select the video card that you have installed for picture capturing. Click **OK**.

7. Click on the **Take Photo** button. This will bring up a free-floating box with the live camera image. This box will use the video software that was installed with the video capture card (in this case a Flashpoint 128 Lite 4M). From here you may make adjustments to the image prior to capturing the photo.



8. Click on the **Capture** button to take the photo.

9. The free-floating box will disappear, and you will see the captured image in the employee photo box in the **Photo** tab. Click on the **checkmark** box in on the upper-left hand corner to save changes.



Retrieving a Photo

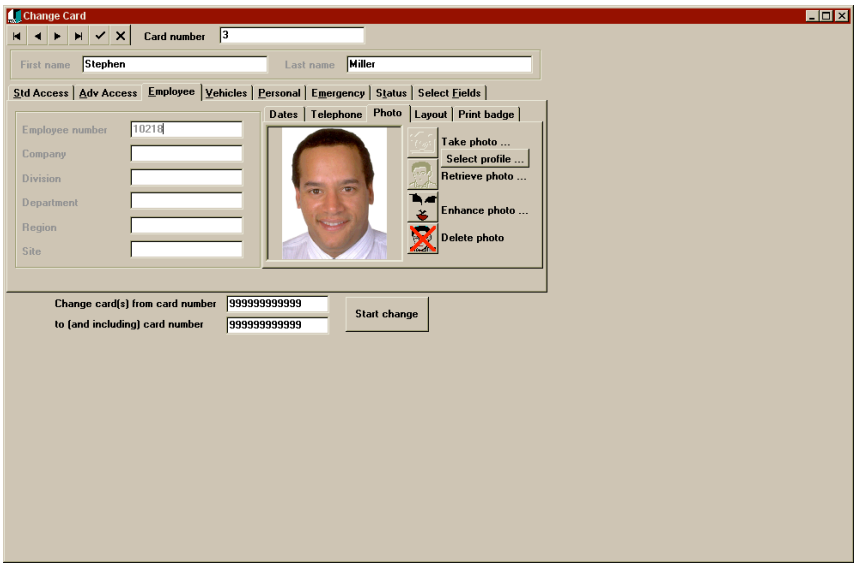
Sometimes it is necessary to capture the photos of several employees at once and to incorporate the photo into the employees card database later. This can be easily done using the Retrieve Photo feature of LiNC-ID.

1. Using the scroll arrow keys, find the specific Employee card.
2. Click to the **Employee** tab.
3. Click to the **Photo** sub-tab inside **Employee** area.
4. Click on the **Retrieve photo** button to grab photos.

⇨**NOTE** If the employee photo box currently has a photo, you will not be able to select the **Retrieve Photo** box. You will first need to delete the current image (by clicking the **Delete photo** button).

5. When LiNC-ID is first installed in ConFigLN, a **Photos** sub-folder is added to the LiNC-NET **Files** database. Captured photos are then automatically stored in the **Photos** sub-folder. When you click the **Retrieve photo** button, the **Open**-**Photos** will appear. With the preview window open, you can see the photo before selecting it. Once the correct photo has been found, click on the **Open** button. Cards are saved under its original card number.

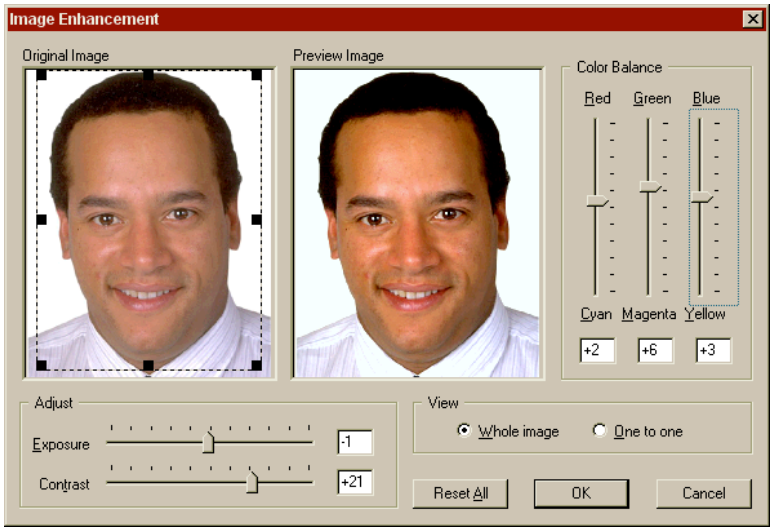
6. The **Open - Photos** button will disappear and the picture will appear in the employee photo box. Click on the **checkmark** button on the top left-hand corner to save changes.



Enhancing a Photo

Once a photo has been added to the employee photo box, you have the option of making changes to the nuances of the photo (coloring, size, cropping).

1. Click on the **Enhance Photo** button to bring up the **Image Enhancement** box.



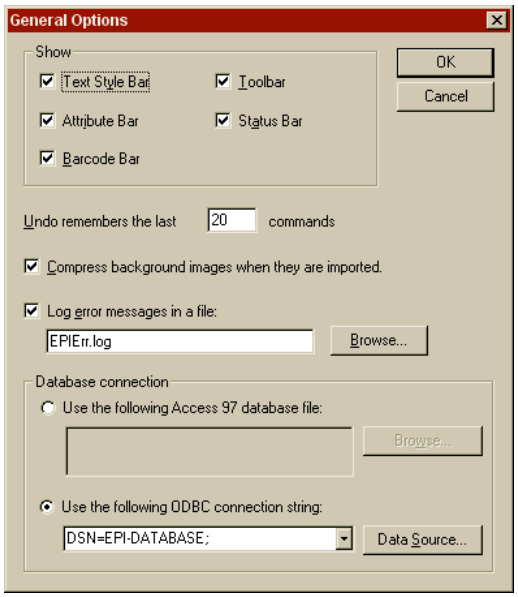
2.Click **OK** when the photo appears the way you wish it to look in the Preview Image box.

3.The **Image Enhancement** box will disappear and the enhanced photo will appear in the employee photo box. Click on the **checkmark** button at the top left-hand corner to save changes.

Designing Badges

LiNC-ID allows you the ability to design your own badges using its **Design Layout** feature. Using LiNC-ID, you can develop a professional-quality unique ID for your business, including employee pictures, graphics and other design elements. **Design Layout** will even allow you to design several types of IDs for different departments.

Setting Up the Design Layout Workspace



You can tailor the **Design Layout** workspace to better suit your needs. For example, you can hide certain parts of the workspace, such as the status bar or any of the tool bars. The workspace setup you choose becomes the default setup used each time you start **Design Layout**.

1. Choose the **Options** command from the **View** menu. The **General Options** dialog box is displayed.
2. In the **Show** section of the **General Options** dialog box, check the following options if you want them to be displayed each

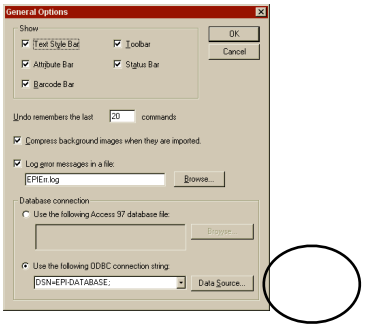
   Text Style Bar
   Tool Bar
   Attribute Bar
   Status Bar
   Barcode Bar

   time you use **Design Layout**:
3. Click **OK**, or proceed to the next section for more configurations.

You can override these options at any time, while still maintaining the default setup, simply by choosing the **Text Style Bar**, **Tool Bar**, **Attribute Bar**, **Status Bar** and **Barcode Bar** commands from the **View** menu.

Specifying Undo Levels

Undo levels are the number of times that actions, or commands can be reversed with the **Undo** command in the **Edit** menu. For instance, if you draw a circle on your card design, and then set the circle's line color from black to red, those actions represent two levels that can be undone. Therefore, if you invoke the **Undo** command twice, the first usage will revert the circle's line color from red to black, and the second **Undo** will delete the circle. If you undo too many levels of actions or commands, you can also reverse the **Undo** with the **Redo** command in the **Edit** menu.



1. Choose the **Options** command from the **View** menu. The **General Options** dialog box is displayed.
2. In the field entitled in "*Undo remembers the last XXX commands*," enter the number of undo levels. The maximum number you can enter here is 100. The minimum is 1. The higher the setting, the more memory **Design Layout** requires to operate.
3. Click on **OK**, or proceed to the next section for more configurations.

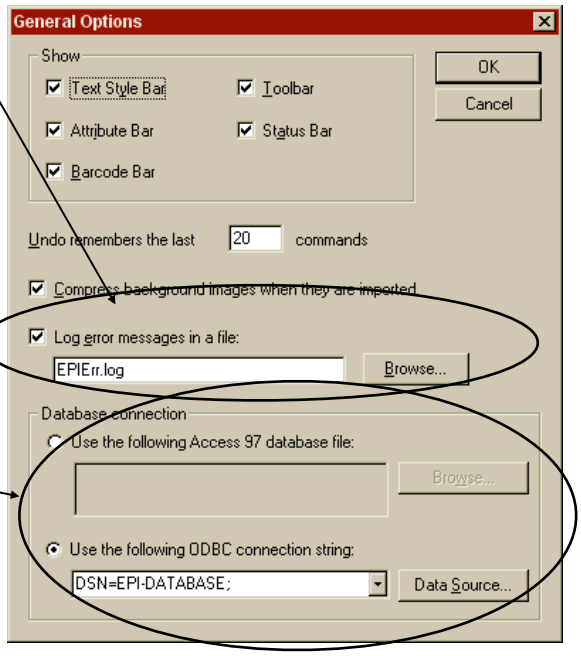
Setting the Error Logging Option

Design Layout allows you to maintain a log for application errors. When the appropriate option is enabled, the system automatically logs all application errors and their corresponding messages in a flat ASCII file. It is recommended that you enable this feature, since it is useful for locating the source of any problems related to your software or hardware systems.

1. Choose the **Options** command from the View menu. The **General Options** dialog box is displayed.

2. Select the **Log Error Messages in a File** option. The default path for the error log file is **C:\WINDOWS \EPIerr.log**. Use the **Browse** button if you are unsure of the drive/ directory where the log file should be stored. When pressed, the **Save As** dialog box will appear, allowing you to browse through the various drives and directories that are available locally and on your network (if the workstation is on a network).

3. Click **OK**, or proceed to the next section for more configurations.



Connecting Design Layout to a Database

Follow these instructions to connect **Design Layout** to the required **Jet**-, or **ODBC-compliant** database.

1. Choose the **Options** command from the **View** menu. The **General Options** dialog box is displayed.
2. Follow the instructions according to your database type: **Microsoft Jet** database.

Adding a Jet Data Source
To connect to a **Jet**-compliant database, click the Access 97® radio button, then type in the full path, or click the **Browse** button to navigate to the file. **Design Layout** will automatically reconfigure itself to use the information stored in that particular database. You can add additional parameters to this connect string, if required.

Adding an ODBC Data Source to a ODBC-compliant database:
To connect to an ODBC-compliant database, click the ODBC radio button, then select the data source from the pick list. You can add additional parameters to this connect string, if required. Click on the Data Source button to add, modify, or delete ODBC data sources.

⇨**NOTE**	The EPISUITE application uses a unique database schema. If you intend to use another database, make sure that it mirrors this schema exactly. If there are any discrepancies, **Design Layout** will return an error message and the fields from your data source will not be accessible from **Design Layout**.

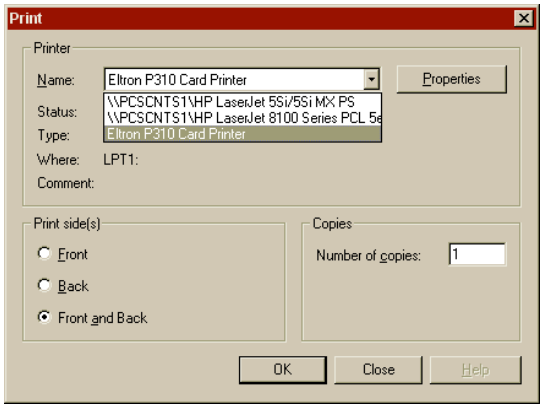
3. Click **OK** to confirm your configuration settings.

Setting Up Printers

You must set up a printer in **Design Layout** before you begin to create and design cards. All of the necessary printer and page information is stored in your card design file, which in turn is used by the EPISUITE application as a card format. A card format is a packet of information that includes the **Design Layout** card design file, the card code generation method, the printer and page setup. Set up printers by following these instructions:

To set up a printer driver, see the Printing Badges section of the **Appendix**.

To Set Up a Card Printer

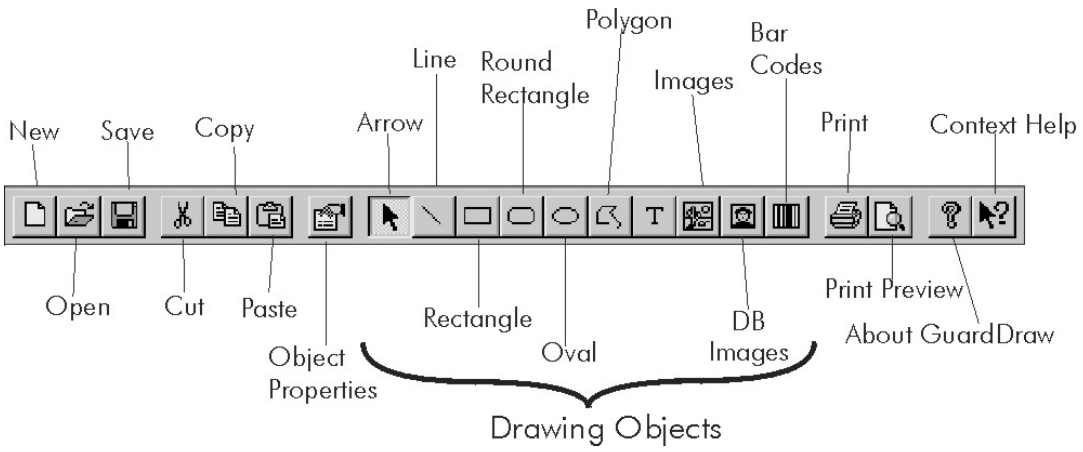


1. Choose the **Print** command from the **File** menu. The **Print** dialog box disappears.
2. Select the printer you want to use. The default printer (as specified in the **Windows® Printers** control panel) will appear in the list box. To select a different printer, scroll down the list and choose from the printers displayed.
3. To determine which side(s) of the card to print, choose from the **Front**, **Back**, or **Front** and **Back** radio buttons. If the card design currently open has only a front or back face, **Design Layout** will make that option the default.
   If you want to print the design in the **Front** editing window on the front of the card, make sure the **Front Only** radio button has been selected. If you want to print the design in the **Back** editing window on the back of the card, make sure the **Back Only** radio button has been selected. If you want to print the design in both editing windows on the front and the back of the card respectively, make sure the **Front** and **Back** radio button has been selected.

⇨**NOTE** With the exception of the **Front Only** radio button, these selections should only be made if you have a specialized printer that prints on both the front and the back of cards, or if you want to manually flip the cards over to print on their backs. If you want to manually flip cards over to print on their backs -especially if you are batch-printing both sides of the cards- you should know that this method will require a moderate amount of trial and error before you achieve satisfactory results.

4. Set the number of copies to be printed in the **Copies** field. The default is one copy.
5. Click the **OK** button.

The Design Layout Workspace



The Tool Bar
The tool bar is displayed across the top of the application window, below the menu bar. The tool bar provides quick mouse access to many of **Design Layout's File**, **Edit**, **Draw**, and **Help** menu commands.

The Drawing Object Buttons

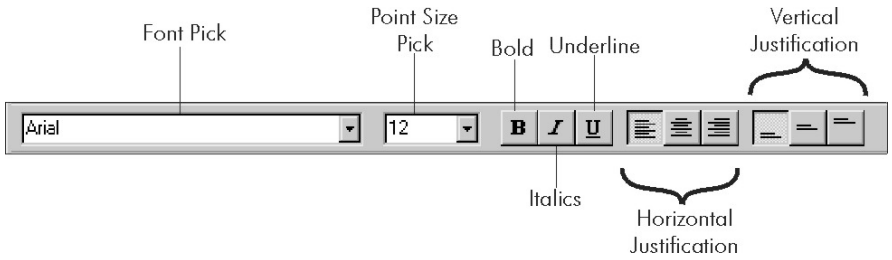
The **Drawing Object** buttons provide quick mouse access to all of the commands in the Draw menu. They allow you to draw:

- lines
- rectangles
- round rectangles (rectangles with rounded corners)
- ellipses
- polygons
- static text objects (text that remains the same from card to card)
- dynamic text objects (text that has been linked to EPISUITE database fields or expressions)
- bitmaps
- image key lines (blank boxes that are linked to the EPISUITE application image display fields)
- bar codes.

The line, rectangle, round rectangle, ellipse and bitmap objects can be constrained to perfectly horizontal or vertical lines, or to perfect squares and circles, by holding down the **SHIFT** key while you draw.

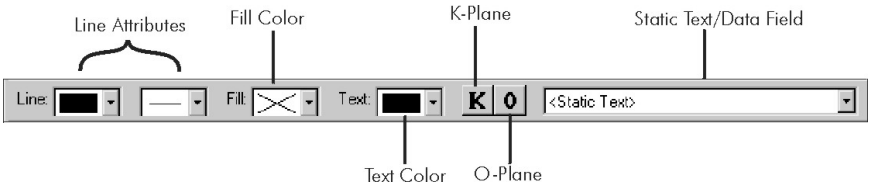
The Text Style Bar

The **Text Style** bar is displayed across the top of the application window, below the tool bar. The text style bar provides quick mouse access to the **Design Layout's Style** menu commands.



The Attribute Bar

The **Attribute** bar is displayed across the top of the application window, below the text style bar. It provides quick mouse access to color settings for lines, object fills, and text.



The **Line Attribute** pick lists determine the color and weight (thickness) of line objects and borders around drawing, text, and image objects.

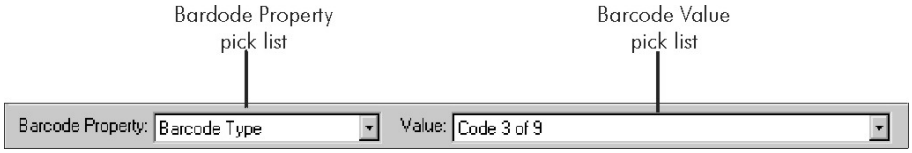
The **Fill Color** and **Text Color** pick lists allow you to select colors for drawing objects (ellipses, rectangles, etc.) and text objects.

The **K** and **O** buttons allow you to shift designated objects, such as bar codes, onto the **K** (resin black) plane, or to apply protective overlays across specific objects in your card design. For further information on **K** and **O** plane printing, refer to "*Placing Objects on the K and O Planes*" later in this user's guide.

The **Static Text/Data Field** pick list allows you to link dynamic text objects and image key lines to EPISUITE database fields and expressions. For instance, you could link a dynamic text object to the **First_Name** field in the database. "*First_Name*" will appear on your card design, in whatever font and point size you select; but it will be replaced by the cardholder's first name (in your specified font and size) when you print the ID card.

The BarCode Bar

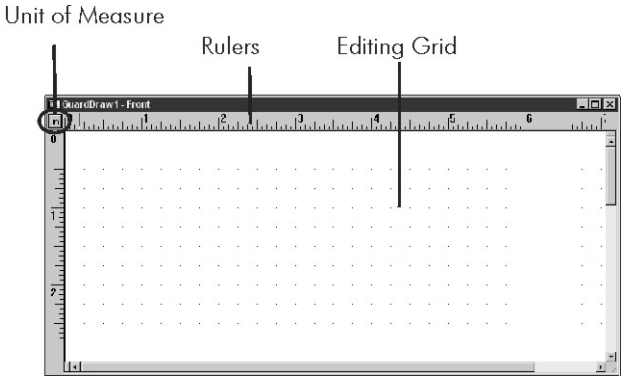
The **BarCode** bar is displayed across the top of the application



window, below the **Attribute** bar. It provides quick mouse access to barcode property settings.

The Design Layout Windows

These areas of the **Design Layout** workspace are where you design your card templates. Whenever a new file is created, **Design Layout** opens a design window for both the front and the back of the card. You do not need to keep the **Back** window open if you intend to design on the front of the card. You may, however, open the **Back** window at any time, simply by choosing the **Back** of **Card** command from the **View** menu.

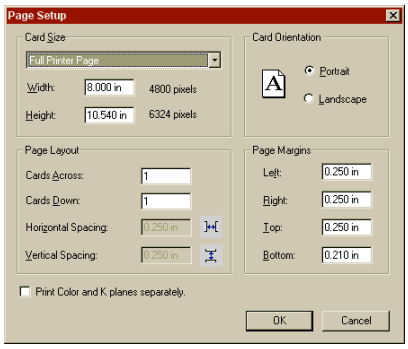


You may have multiple **Front** and **Back** design windows open at the same time.

Selecting Page Sizes

Different types of ID cards come in different sizes, depending on the types of cards a printer will output. It is, therefore, very important that you select the card page size before you begin to design your card, since resizing the page could have a serious impact on the overall design. This information is stored in the card design file and is used by the LiNC-ID application during the printing process.

1. Make sure you set up the appropriate default printer. See the section "*Setting Up Printers*" for details.
2. Choose the **Page Setup** command from the **File** menu. The **Page Setup** dialog box appears.
3. Select the required card size from the options listed in the **Card Size** pick list. Select any of the defaults, or select **Custom SizeIt** to specify your own dimensions.
4. Select the card's orientation on the printed page as either **Portrait** or **Landscape**. This affects only the orientation of the cards themselves, and is not connected to the orientation of the page.
5. Adjust the card's width and height, if desired. By modifying these settings, you are automatically resetting the card size to a custom configuration.
6. Adjust the left, right, top, and bottom page margins, if desired.
7. In the **Cards Across** field, indicate the number of cards that are to be printed across the page (for batch printing purposes). In general, a landscape page



will allow you to print more cards across than a portrait page, though you will not be able to print as many cards down.

8. In the **Cards Down** field, indicate the number of cards that are to be printed down the page (for batch printing purposes). In general, a portrait page will allow you to print more cards down than a landscape page, though you will not be able to print as many cards across.
9. Adjust the horizontal and/or vertical spacing between the cards printed on the page, if desired.
10. Check the **Print Color and K Planes Separately** option if your card printer prints four process colors (cyan, magneta, yellow and black) when they are specified on separate document “pages.” The first page should be in CMY, and the second should be monochrome. This option merges the two pages into one, to output four-color process.
11. Click **OK** to confirm the card setup configuration.

Creating New Card Designs

Whenever a new file is created, **Design Layout** opens two design windows: one for the front of the card, and another for the back. You do not need to keep the **Back** design window open if you only intend to print on the front of the ID card. You can, however, open the **Back** design window at any time simply by choosing the **Back of Card** command from the **View** menu. The same also applies to the **Front** design window.

You can have multiple front and back card designs open at the same time.

1. Make sure you have already set up a default printer and specified the card size and orientation.
2. Choose the **New** command from the **File** menu, or click the **New** button on the tool bar. **Design Layout** will open two new design windows: one for the front of the card, and another for the back.
3. Click on the design window of your choice.
4. If necessary, import a card background via the **Import Background** command in the **Edit** menu.
5. Design your card.

Opening Existing Card Design Files

To Open an Existing Card Design File

1. Choose the **Open** command from the **File** menu. The **File Open** dialog box displays.

2. In the **File Name** field, type the name of the card design you want to open, or select it from the list.

⇨**NOTE**	If the card design you want is in another drive or directory, select it from the Look In pick list. You will only be able to access network drives that are mapped to your PC (see your network administrator for more information).

3. Click on the **Open** button.

To Open a Recently Saved Card Design

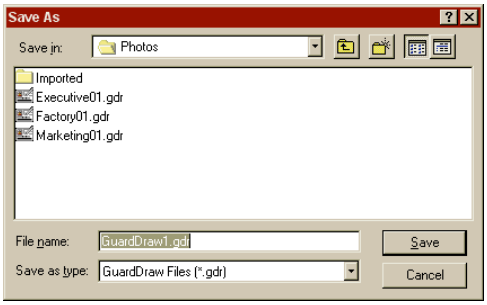
1. Open the **File** menu. The last four card designs that were saved to the disk will be listed at the bottom of the menu, directly above the **Exit** command.

2. Choose the name, or number, of the card design that you want to open.

Saving Card Designs

To Save a Card Design For the First Time

The **Save** command displays a dialog box where you can give a new card design a filename and specify a location in which to store it.



1. Choose the **Save** command from the **File** menu. A **Save As** dialog box appears.
2. To save the drawing in the current drive and directory, type a name in the **File Name** field. **Design Layout** will automatically add the extension **.GDR** to the file name.
3. Click **OK**.

⇨**NOTE** If you want to save the drawing in a different drive, or directory, type the entire path name in the File Name field, or select the drive from the Look In list. You will only be able to access network drives that are mapped to your PC (see your network administrator for more information).

To Save Previously-Saved Card Designs

1. Choose the **Save** command from the **File** menu; or
2. If you want to save the design with a new filename, choose the **Save As** command from the **File** menu, and follow Steps 2 and 3 above.

Importing, or Removing, the Card Background

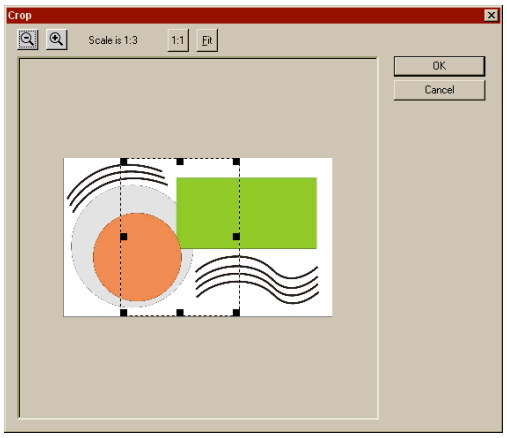
Card backgrounds are graphics, such as bitmap images, which are created in other draw, or paint, programs. The background is the graphic “landscape” against which the various card design objects (e.g., images, text objects, etc.) are placed.

To Import the Card Background

1. Make sure that you have selected the appropriate card design window (either the front or the back).
2. Choose the **Import Background** command from the **Edit** menu. The **Open** dialog box appears.
3. In the **File Name** field, type the name -including the path and extension- of the background file you want to insert into your card design, or use the buttons to browse your file.

4. Click **OK**.
5. The **Crop** dialog box will appear with your card background image displayed inside it. Use the different buttons on the dialog box to increase, or decrease, the magnification of the image. Use your mouse pointer to resize, or move, the highlighting box until you are satisfied with the appearance of your picture.
6. Click **OK**. The card background will be placed on either the front or the back of your card design.

To Crop the Card Background



When you add a background image to the card design, it is placed in a dialog box that allows you to crop it to taste. Once in the **Crop** dialog box, you will notice that a highlighting box with eight sizing handles is placed directly over the center of the image. The size of this highlighting box will change depending on your selected page size (see "*Selecting Page Sizes*"). At this point, you can either capture the portion of the image "as is," or resize the highlighting box to capture some, or all, of the image.

To Capture the Whole Image

1. Place your mouse pointer within the highlight box's cropping area. The pointer will change from a single arrow to a four-headed arrow. This allows you to move the cropping area across the newly acquired image.
2. Press and hold down your left mouse button, and drag (move) the cropping area to the desired location on the background image. Release the left mouse button when you are satisfied with the new location of the highlighting box.
3. Click **OK**. The card background will be placed on either the front, or the back, of your card design.

To Capture a Portion of the Image

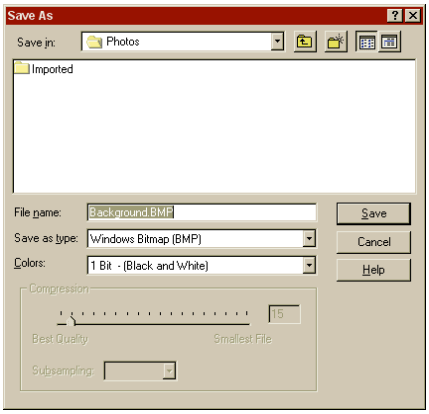
1. Place your mouse pointer directly over one of the highlighting box handles. The pointer will change from a single arrow to a two-headed arrow. This allows you to resize the cropping area.
2. Press and hold down your left mouse button, and drag (move) the handle toward the center of the cropping area.
3. When the cropping area is sized to your satisfaction, move the highlight box so that it covers the portion of the image that you want to capture.
4. Click **OK**. The card background will be placed on either the front, or the back, of your card design.

To Remove the Card Background

1. Make sure that you have selected the appropriate card design editing window (either the front or the back).
2. Choose the **Remove Background** command from the **Edit** menu.
3. The system will ask: “Are you sure you want to remove the background image from the front/back of the card?” Choose **Yes** to remove the card background image. Choose **No** to cancel.

To Export the Card Background

1. Choose the **Export Background** command from the **Edit** menu. The **Save As** dialog box will be displayed so you can name your image, define the file type, and specify the directory to which it will be saved.



Drawing Shapes

Design Layout comes complete with an extensive selection of tools that allows you to design cards with ease. Use lines, squares, circles, rectangles, ellipses and polygons to spice up your illustration, or to create security clearance symbols for easy identification of unauthorized persons.

Lines

To Draw a Line

1. Click on the **Line** button in the **Tool** Bar, or choose the **Line** command from the **Draw** menu.
2. Move the mouse pointer onto the editing screen.
3. Press and hold down the left-click mouse button to anchor one end of the line, and then drag the pointer. A flexible line stretches from the anchor point to the new pointer position.
4. When you are satisfied with the line, release the left-click mouse button.

To Edit a Line

1. Select the line. Handles will appear at either end of the line.
2. Position the mouse pointer over one of the handles, then press and hold down the left-click mouse button.
3. Drag the pointer to a new position on the editing screen.
4. When you are satisfied with the line, release the left-click mouse button.

Rectangles

To Draw a Rectangle

1. Click on the **Rectangle** button in the **Tool** bar, or choose the **Rectangle** command from the **Draw** menu.
2. Move the mouse pointer onto the editing screen.
3. Press the left-click mouse button to anchor one corner of a flexible rectangle, and then drag the pointer. The flexible rectangle stretches from the anchor point to the new pointer position.
4. When you are satisfied with the rectangle's size and shape, release the left-click mouse button.

To Edit a Rectangle

1. Select the rectangle. Handles will appear on each side and corner of the object.
2. Position the mouse pointer over one of the handles, then press and hold down the left-click mouse button.
3. Drag the pointer to a new position on the editing screen.
4. When you are satisfied with the rectangle's new size and shape, release the left-click mouse button.

To Draw a Perfect Square

Hold down the **SHIFT** key while you draw the rectangle.

Round Rectangles

To Draw a Round Rectangle

1. Click on the **Round Rectangle** button, or choose the **Round Rectangle** command from the **Draw** menu.
2. Move the mouse pointer onto the editing screen.
3. Press the left-click mouse button to anchor one corner of a flexible rectangle, and then drag the pointer. The flexible rectangle stretches from the anchor point to the new pointer position.
4. When you are satisfied with the rectangle's size and shape, release the left-click mouse button.

To Edit a Round Rectangle

1. Select the **Round Rectangle**. Handles will appear on each side and corner of the object.
2. Position the mouse pointer over one of the handles, then press and hold down the left-click mouse button.
3. Drag the pointer to a new position on the editing screen.
4. When you are satisfied with the rectangle's new size and shape, release the left-click mouse button.

To Edit Rounded Corner Curvatures

1. Select the round rectangle.
2. A special handle appears inside the upper right-hand corner of the rounded rectangle. Position your mouse pointer over that handle, and the pointer will change from a single-headed arrow to a four-headed arrow.
3. Hold down the left-click mouse button, and drag the handle toward the center of the object to increase the curvature of the rounded corners, or away from the center of the object to decrease the curvature.
4. When you are satisfied with the rectangle's new shape, release the left-click mouse button.

To Draw a Perfect Square

Hold down the **SHIFT** key while you draw the rounded rectangle and it will function as a square.

Ellipses

To Draw an Ellipse
1. Click on the **Ellipse** button in the **Tool** bar, or choose the **Ellipse** command from the **Draw** menu.
2. Move the mouse pointer onto the editing screen.
3. Press the left-click mouse button to anchor one corner of a flexible rectangle, and then drag the pointer. The flexible ellipse stretches from the anchor point to the new pointer position.
4. When you are satisfied with the ellipse's size and shape, release the left-click mouse button.

To Edit an Ellipse
1. Select the ellipse. Handles will appear on each side of the object.
2. Position the mouse pointer over one of the handles, then press and hold down the left-click mouse button.
3. Drag the pointer to a new position on the editing screen.
4. When you are satisfied with the ellipse's new size and shape, release the left-click mouse button.

To Draw a Perfect Circle
Hold down the **SHIFT** key while you draw the ellipse.

Polygons

To Draw a Polygon
1. Click on the **Polygon** button in the **Tool** Bar, or choose the **Polygon** command from the **Draw** menu.
2. Move the mouse pointer onto the editing screen.
3. Press the left-click mouse button to anchor one corner of a flexible polygon, and then move the pointer. A flexible line stretches from the anchor point to the new pointer position.

⇨**NOTE**	Do not hold down the left mouse button during this procedure, since the Polygon tool will continue to create anchor points as you move the pointer.

4. When you reach the point where you want the line to end, press the left-click mouse button to create another anchor point.
5. Continue adding sides in this fashion.
6. To add the last side, double-click where you want the point to end.

To Edit a Polygon
1. Select the ellipse. Handles will appear at each anchor point you have created.
2. Position the mouse pointer over one of the handles, then press and hold down the left-click mouse button.
3. Drag the pointer to a new position on the editing screen, and then release the left-click mouse button.
4. Continue editing sides in this fashion.

Adding Static and Dynamic Text

The **Text** command performs two functions in **Design Layout**. It can create static text objects, which are used as non-changeable design elements such as headlines, or field labels (for example, **First Name**). It can also create dynamic text/data objects -objects that are connected to a data field, or expression, and which change from card to card (for example, the first name of the cardholder).

Not Shown: Region, Site and Date

The dynamic text/data field options available through the **Text** pick list are directly dependent on the type of database connection you have. For example, if **Design Layout** is configured to access the textual data in your database, it will retrieve the available field names through the **GA_TABLENAMES** table. This points to the tables in your database, which contain all of the data you will be printing on your cards. The field names displayed in the **Text** pick list will have the table name as a prefix. If there is no prefix, then the field name is an alias located in the **GA_ALIAS** table. Aliases behave in much the same way as the **Label** does in an **Expression**, allowing you to create more meaningful, or shorter, names for the fields you need to access.

When **Design Layout** has access to your database, you will have full use of the **Define Expressions** feature. Special programming experience is not required to create dynamic text objects. However, knowledge of your database's particular SQL expressions, if you intend to use expressions in your card design (see "*Defining Expressions*"), is required.

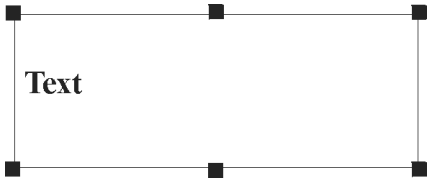
If **Design Layout** does not have access to textual data, it will display the field names found in the **GA_LAYOUT FIELDS** table. This table contains tags that are used to retrieve the available data fields directly from your application. Therefore, the text/ data field options must be pre-configured in this table to reflect the input fields in your application in order to be available from the **Text** pick list. Please note that the **Define Expressions** feature is not available in this mode.

The links between the database (or table) and your card design are created automatically. Thus, your only task is to select the font, style, point size, color, and location of both the data fields/expressions and text objects.

To Create Static Text Objects

1. Click on the **Text** button in the **Tool** bar, or choose the **Text** command from the **Draw** menu.
2. Click on the arrow to the right of the **Text/Data** Field pick list in the **Attribute** bar. The list will expand to reveal your available text/data field options.
3. Select **<STATIC TEXT>** from the pick list.

4. Move your mouse pointer onto the editing screen. The pointer will change from an arrow to a cross.
5. Press and hold down the left mouse button to anchor one end of the text box, and then drag the pointer. A flexible box stretches from the anchor point to the new pointer position.
6. When you are satisfied with the size and location of the text box, release the left mouse button.



7. Click on the **Select** button in the **Tool** bar, or choose the **Select** command from the **Draw** menu.
8. Double-click on the text box, or select the text object and choose **Object Properties** from the **Edit** menu. A **Static Text Properties** dialog box will appear.
9. Make whatever option selections are necessary, then choose **OK**.
10. Select the font, style and point size by using the pick lists in the **Text Style** bar, or by choosing the **Font** command in the **Style** menu.
11. Select the text color by using the **Text Color** pick list in the **Attribute** Bar, or by choosing the **Text Color** command in the **Object** menu.
12. Adjust the text justification by using the Justify buttons in the **Text Style** Bar.
13. Select the text box line and fill colors by using the pick lists in the **Attribute** Bar, or by using the **Line Color** and **Fill Color** commands in the **Object** menu.
14. Adjust the text box line weight by using the **Line Weight** pick list in the **Attribute** bar.
15. Click on the horizontal and vertical justification buttons, to determine the text object's placement within the text box.

To Create a Dynamic Text Object

1. Click on the **Text** button in the **Tool** bar, or choose the **Text** command from the **Draw** menu.
2. Click on the arrow to the right of the **Text/Data Field** pick list in the **Attribute** bar. The list will expand to reveal your available text/data field options.
3. Select any database field or expression available.
4. Repeat **Steps 4** to **7** above.
5. Double-click on the text box, or choose the **Object Properties** command from the **Edit** menu. The **Dynamic Text Properties** dialog box will appear.
6. Make whatever option selections are necessary, then choose **OK**. Refer to **Editing Object Properties** for more details.
7. Repeat **Steps 10** to **15** above.

To Convert a Static Text Object to a Dynamic Text Object

1. Select the text object.
2. Click on the arrow to the right of the **Text/Data Field** pick list in the **Attribute** bar. The list will expand to reveal your available text/data field options.
3. Select any of the data fields available from the pick list.

Adding Images

To Add Database Images

Digital images such as photographs, fingerprints, signatures and clip art can be added to the card design using a drawing tool. The **DB Image** tool is used to create a **keyline** for any dynamic image type as defined in the **GA_IMAGE/INFO** table. The **Image** tool allows you to import static image files from any external source.

Image **keylines** are automatically linked to the EPISUITE database. When you print cards with the EPISUITE application, the **keylines** are replaced by the cardholder's images. Hard-to-counterfeit "ghosts" and cameo effects can also be defined for the image **keylines**, thus providing an extra level of security to the cards you issue.

1. Click on the **DB Image** button in the **Tool** bar, or choose the **DB Image** command from the **Draw** menu. You will notice that the default option in the **Static Text/Data Field** pick list has changed to **Photograph**.
2. Click on the arrow to the right of the **Static Text/Data Field** pick list. The list will expand to reveal your available data field options (e.g., **Fingerprint**, **Photograph** or **Signature**).

⇨**NOTE**

In the current version of LiNC-ID, the **Fingerprint** and **Signature** options are not supported at this time.

3. Select **Photograph** to draw a photograph **keyline** on the card, or select **Signature** to draw a signature **keyline**, etc.

4. Move your pointer onto the editing screen. The pointer will change from an arrow to a cross.
5. Press and hold down the left mouse button to anchor one end of the image box, and then drag the pointer. A flexible box stretches from the anchor point to the new pointer position.

⇨**NOTE** Do not worry about sizing the **keyline** to its proper dimensions when you draw it on your card design. All **keylines** are automatically constrained to the aspect ratios of their respective images, as defined in the EPISUITE application; therefore, they will always print perfectly, no matter what size you specify for them.

6. When you are satisfied with the size and location of the image **keyline**, release the left mouse button.

To Create an Image Ghost

An image ghost is generally used in addition to a regular image and can be placed anywhere on the card design-even behind the text or other objects. This is considered to be an additional ID security feature, since ghosted images are extremely difficult to reproduce.

For complete details on creating image ghosts, refer to "*Editing Object Properties*" later in this user's guide.

To Create a Cameo Effect

For complete details on removing the image background (that is, creating a cameo effect or chromakey), refer to “*Editing Object Properties*” later in this user's guide.

To Add Images

Image objects are similar to card backgrounds, except that they can be placed on your card design in much the same way as objects such as images, barcodes, and static or dynamic text.

1. Click on the **Image** button in the **Tool** Bar, or choose the **Image** command from the **Draw** menu.
2. Move the mouse pointer onto the editing screen.
3. Press the left mouse button to anchor one corner of a flexible rectangle, and then drag the pointer. The flexible highlighting box stretches from the anchor point to the new pointer position.
4. When you are satisfied with the highlighting box's size and shape, release the left mouse button. The **Image Properties** dialog box appears.
5. Choose the **Load Image** button. An **Open** file dialog box appears.
6. Select the image file you want to load into your card design, and click **OK**. You will be returned to the **Image Properties** dialog box, and the image will be loaded onto the card design. If you wish, reposition the **Image Properties** dialog box so that you can view the image object beneath it. This will allow you to reset the object's properties, and see immediately how they will affect the appearance of the image.
7. Select whatever image property options are necessary. Refer to "*Editing Object Properties*."
8. Click **OK**.

Image ghosts and cameo effects can be applied to **Image** objects. For complete details, refer to "*Editing Object Properties*."

To Resize an Image

1. Select the image. Handles will appear on each side and corner of the object.
2. Position the pointer over one of the handles, then press and hold down the left mouse button.
3. Drag the pointer to a new position on the editing screen.
4. When you are satisfied with the image's new size and shape, release the left mouse button.

To Draw a Perfect Square

Hold down the **SHIFT** key while you draw the highlighting box. The image will be sized to fit within the square.

Moving and Rotating Objects

Dragging objects with the mouse lets you position them interactively.

To Move an Object

1. Select the object you want to move.
2. Press and hold the left mouse button.
3. Drag the object to its new location.
4. Release the left mouse button to complete the move.

Alternatively, you may select the object and press any of the keyboard arrow keys to move it. This is called “nudging.”

To Leave the Original Object Behind

1. Select the object you want to move.
2. Press and hold down the **CTRL** key, and then press and hold down the left mouse button. This will create a copy of the object behind the original.
3. Drag the copy of the object to its new location.
4. Release the left mouse button to complete the move.

To Rotate an Object

1. Select the object you want to rotate.
2. Choose the **Rotate by 90 Degrees** command from the **Style** menu. The object will rotate, clockwise, by 90 degrees.
3. Repeat until the object’s appearance is to your satisfaction.

⇨**NOTE**	Rotating can be used to design duplex cards with different front and back page orientations.

Resizing Objects

To Resize Objects

1. Select the object. Handles will appear on each of its sides and at its corners.
2. Position the mouse pointer over one of the handles, then press and hold down the left mouse button.
3. Drag the pointer to a new position on the editing screen.
4. When you are satisfied with the object’s new size and shape, release the left mouse button.

⇨**NOTE**	You cannot resize static text objects, in the sense that the point size of the font will be increased, or decreased, as you stretch the text box. Rather, when you resize the text box, you expand, or contract the amount of available space in which the text will fit. This is particularly important if you increase the font’s point size, or if you type too much text to fit within the text box. To reveal text that has been hidden due to constraints in the size of the text box, follow the instructions above.

Changing Object Attributes

To Change Line Attributes

Object attributes such as line weight or fill color, can be changed at any time while you are creating or editing the card design.

1. Click on the line using the **Select** tool.
2. Change the line color by selecting from the sixteen quick-access colors in the **Line Color** pick list, or choose the **Line Color** command from the **Object** menu for a more extensive selection of colors.
3. Change the line weight by selecting from the **Line Weight** pick list in the **Attribute** Bar.

To Change Object Attributes

1. Click on the object (e.g., a rectangle, image or text object) using the **Select** tool.
2. Change the line color by selecting from the sixteen quick-access colors in the **Line Color** pick list, or choose the **Line Color** command from the **Object** menu for a more extensive selection of colors.
3. Change the fill color by selecting from the sixteen quick-access colors in the **Fill Color** pick list, or choose the **Fill Color** command from the **Object** menu for a more extensive selection of colors.
4. If the object is static or dynamic text, change the text color by selecting from the sixteen quick-access colors in the **Text Color** pick list, or choose the **Text Color** command from the Object menu for a more extensive selection of colors.
5. Change the line weight by selecting from the **Line Weight** pick list in the **Attribute** Bar.

To Change Signature Fill and Text Attributes

You can modify signatures so that they are printed in different colors, with or without image frame fills.

1. Click on the signature using the **Select** tool.
2. Change the fill color by selecting from the sixteen quick-access colors in the **Fill Color** pick list, or choose the **Fill Color** command from the **Object** menu for a more extensive selection of colors. Choose "**x**" for no fill, so that the signature is printed against the card background.
3. Change the color of the signature itself by selecting from the sixteen quick-access colors in the **Text Color** pick list, or choose the **Text Color** command from the **Object** menu for a more extensive selection of colors.

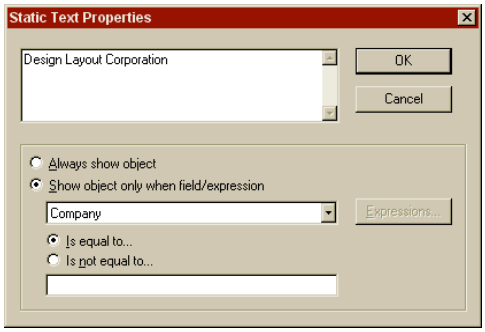
If you plan to create several objects with the same attribute settings (i.e., line weight, fill color, etc.), and you do not want to reset the attributes for each individual object, you can specify them as defaults by performing the following tasks:

To Set Default Attributes

1. Draw your initial object, and then define its attributes.
2. Select the **Set Default Attributes** command from the **Object** menu. This will set the default attributes to those of the object you have just created.
3. Draw your remaining objects.

Editing Object Properties

Static Text Properties



1. Double-click on the text box using the **Select** tool, or select the text object and choose **Object Properties** from the **Edit** menu. The **Static Text Properties** dialog box appears.

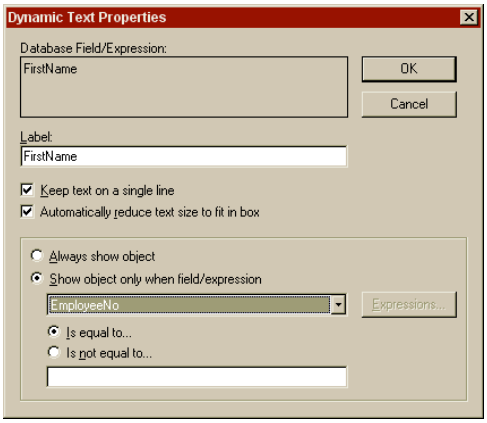
   The following options will be available to you:

   Text Editing Box
   Displays the selected static text using the Microsoft Windows® screen font. To edit the text, simply click anywhere within this editing box and make whatever modifications are necessary.

   Conditional Display Options
   Conditional display options are available. For complete information on these settings and what they do, see "**Conditional Display Options**" below.

2. Make whatever option selections are necessary, then click **OK**.

Dynamic Text Properties



1. Double-click on the text box using the **Select** tool, or choose **Object Properties** from the **Edit** menu. A **Dynamic Text Properties** dialog box appears.

   The following options will be available to you:

   Database Field/Expression
   Lists the currently-selected dynamic text object for your visual verification.

   Label
   Enter a new label for the dynamic text object, if desired. This does not affect output at print time, but rather is used to provide a more significant identifier to the object. For instance, if the database field used to output the date a card was issued is called ISSUANCE_DATE, you might want to rename the label "Issue Date" to better identify it on your card design.

   This feature is particularly handy if you have written a lengthy database expression, and want to edit the label for brevity.

   Keep Text on a Single Line
   Check this box if you want to keep the dynamic output text on a single line. If you do not check this box, text will wrap around within the dynamic text object frame. Please note that this option, when selected, could truncate the output text if it is too long to fit on a single line within the object frame. If this occurs, make sure the following option box has been selected.

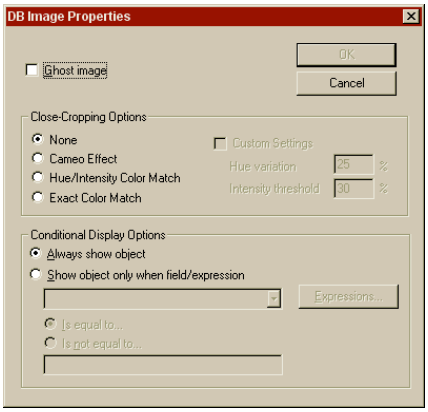
Automatically Reduce Text Size to Fit in the Box
Check this box if you want to automatically reduce the font point size so that longer, single-line text will fit within the object frame. This is usually used in conjunction with the preceding option, so that output text is not truncated.

Conditional Display Options
Conditional display options are available. For complete information on these settings and what they do, see “Conditional Display Options” below.

2. Make whatever option selections are necessary, then choose **OK**.

DB Image Properties

1. Double-click on the database image using the **Select** tool. The **DB Image Properties** dialog box appears.



The following options will be available to you:

Ghost Image
Check this option if you want to create a image ghost.

⇨**NOTE**	An image ghost is generally used in addition to a regular image, and can be placed anywhere on the card design- even under text or other objects. It is considered an additional ID security feature, since ghosted images are extremely difficult to reproduce.

Close-Cropping Options
The following options allow you to "*close-crop*" (i.e., remove the background pixels) an image. The option you select depends on the image quality of the background you want to remove. For tips on how to use these settings, refer to "*Using the Close-Cropping Options*" in the **Tips & Tricks** section.

None
Choose this option if you do not want to close-crop the image.

Cameo Effect
Check this option if you want to create a cameo effect. This will remove all background pixels around the subject of the image (i.e., the cardholder's head).

⇨**NOTE**	The entire image background will not be removed if it is very dark or if there are distinct variations in shading. To work around this problem, click on the **Custom Settings** check box (described below), and enter your custom **Hue Variation** and **Intensity Threshold** percentages. If the background pixels are too dark, no amount of manipulation will produce a satisfactory result.

Hue/Intensity Color Match
Check this option if you want to remove all pixels within a specified hue/intensity range. This option is particularly useful if you are having trouble removing background pixels with the **Exact Color Match** option. Click on the **Custom Settings** check box (described below), and enter your custom **Hue Variation** and **Intensity Threshold** percentages.

Exact Color Match
Choose this option if you want to remove all background pixels that are exactly the same color. This option is particularly useful for solid-color backgrounds, which are commonly found in hand-made bitmap files (e.g., logos, etc.).

Custom Settings
This check box and its corresponding settings are enabled when you choose the **Cameo Effect** and **Hue/Intensity Color Match** options above. Use it to enter custom percentages for the following settings:

Hue Variation
This is the percentage of the hue that **Design Layout** will use to scan for variations of the background pixels along the color spectrum. **Design Layout** removes pixels by sampling the first one located in the upper left-hand corner of the image. It then uses this setting to scan for pixels of a similar hue along the specified percentage of the color spectrum. A higher value means that **Design Layout** will scan and remove pixels across a wider percentage of the color spectrum. A lower setting means that **Design Layout** will confine the removal to pixels that more closely match the first one that was sampled.

Example	For example: If you enter a setting of "**30**" here, and if the image's first pixel is a shade of green, then **Design Layout** will scan and remove all shades of green across 30 percent of the spectrum (and possibly into portions of the yellow and blue color ranges).

Intensity Threshold
This is the percentage that **Design Layout** will use to scan for variations in color intensity. **Design Layout** removes pixels by sampling the first one located in the upper left-hand corner of the image. It then uses this setting as a threshold by which all pixels of a certain intensity (and higher) will be scanned. A higher value means that **Design Layout** will confine its removal to the brighter pixels that fall within the specified **Hue Variation** range. A lower setting means that **Design Layout** will widen its scan and remove a broader range of bright and dark pixels within the specified **Hue Variation**.

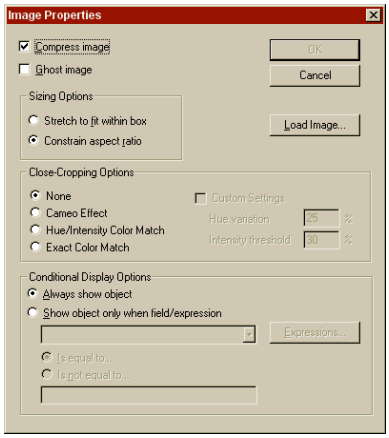
Example	If you enter a setting of “60” here and a setting of “30” in **the Hue Variation** box, and if the image’s first pixel is a shade of green, then **Design Layout** will scan and remove all of the brighter shades of green across 30 percent of the color spectrum. In other words, fewer green pixels will be removed from the image. If, on the other hand, you lowered this setting to “20”. the removal will include a broader range of both light and dark green pixels.

Conditional Display Options
Conditional display options are available. For complete information on these settings and what they do, see “Conditional Display Options” below.

2. Make whatever option selections are necessary, then click **OK**.

Image Properties

1. Double-click on the image object using the **Select** tool, or choose **Object Properties** from the **Edit** menu. The **Image Properties** dialog box appears.



   The following options will be available to you:

   Compress Image
   Check this option if you want to maintain the original image file's compression ratio.

   Ghost Image
   Check this option if you want to create a image ghost.

⇨**NOTE**	An image ghost is generally used in addition to a regular image, and can be placed anywhere on the card design- even under text or other objects. It is considered an additional ID security feature, since ghosted images are extremely difficult to reproduce.

   Close-Cropping Options
   The following options allow you to “close-crop” (i.e., remove the background pixels of) an image. The option you select depends on the image quality of the background you want to remove. For tips on how to use these settings, refer to “*Using the Close-Cropping Options*” in the **Tips & Tricks** section.

   None
   Choose this option if you do not want to close-crop the image.

   Cameo Effect
   Check this option if you want to create a cameo effect. This will remove all background pixels around the subject of the image (i.e., the cardholder's head).

⇨**NOTE**	The entire image background will not be removed if it is very dark or if there are distinct variations in shading. To work around this problem, click on the **Custom Settings** check box (described below), and enter your custom **Hue Variation** and **Intensity Threshold** percentages. If the background pixels are too dark, no amount of manipulation will produce a satisfactory result.

   Hue/Intensity Color Match
   Check this option if you want to remove all pixels within a specified hue/intensity range. This option is particularly useful if you are having trouble removing background pixels with the **Exact Color Match** option. Click on the **Custom Settings** check box (described below), and enter your custom Hue Variation and Intensity Threshold percentages.

   Exact Color Match
   Choose this option if you want to remove all background pixels that are exactly the same color. This option is particularly useful for solid-color backgrounds, which are commonly found in hand-made bitmap files (e.g., logos, etc.).

Custom Settings
This check box and its corresponding settings are enabled when you choose the **Cameo Effect** and **Hue/Intensity Color Match** options above. Use it to enter custom percentages for the following settings:

Hue Variation
This is the percentage of the hue that **Design Layout** will use to scan for variations of the background pixels along the color spectrum. **Design Layout** removes pixels by sampling the first one located in the upper left-hand corner of the image. It then uses this setting to scan for pixels of a similar hue along the specified percentage of the color spectrum. A higher value means that **Design Layout** will scan and remove pixels across a wider percentage of the color spectrum. A lower setting means that **Design Layout** will confine the removal to pixels that more closely match the first one that was sampled.

For example: If you enter a setting of "30" here, and if the image's first pixel is a shade of green, then **Design Layout** will scan and remove all shades of green across 30 percent of the spectrum (and possibly into portions of the yellow and blue color ranges).

Intensity Threshold
This is the percentage that **Design Layout** will use to scan for variations in color intensity. **Design Layout** removes pixels by sampling the first one located in the upper left-hand corner of the image. It then uses this setting as a threshold by which all pixels of a certain intensity (and higher) will be scanned. A higher value means that **Design Layout** will confine its removal to the brighter pixels that fall within the specified **Hue Variation** range. A lower setting means that **Design Layout** will widen its scan and remove a broader range of bright and dark pixels within the specified **Hue Variation**.

For example: If you enter a setting of *if60ln* here and a setting of *if30ln* in the **Hue Variation** box, and if the image's first pixel is a shade of green, then **Design Layout** will scan and remove all of the brighter shades of green across 30 percent of the color spectrum. In other words, fewer green pixels will be removed from the image. If, on the other hand, you lowered this setting to "20." the removal will include a broader range of both light and dark green pixels.

Stretch to Fit Within Box
Check this option if you want to resize (or stretch) the image so that it fits inside the drawing box. You should be aware that this option will override the image's aspect ratio, thus distorting the
image.

Constrain Aspect Ratio
Check this option if you want to constrain the image's aspect ratio, thus protecting the image from distortion.

Conditional Display Options
Conditional display options are available only. For complete information on these settings and what they do, see "*Conditional Display Options*" below.

2. Make whatever option selections are necessary, then click **OK**.

Object Properties

1. Double-click on the object using the **Select** tool, or choose **Object Properties** from the **Edit** menu. The **Object Properties** dialog box appears.

   The following options will be available to you:

   Conditional Display Options
   Conditional display options are available only. For complete information on these settings and what they do, see "*Conditional Display Options*" below.

2. Make whatever option selections are necessary, then choose **OK**.

Conditional Display Options

Conditional display options allow you to print objects on the card design only if certain conditions are met. This allows you to adapt the same card format to meet the identification needs of various departments within your organization.

Always Show Object
Click on the radio button if you want to print the object on all ID cards.

Show Object Only When Field/Expression
Click on the radio button if you want to print the object on specific ID cards. The field beneath the radio button will be enabled. To define the instances in which this object should be printed on the card, click on the arrow to the right of the field. A drop-down list will appear. You may scroll through and select any of the available data fields.

You must use this option in conjunction with one of the two remaining options described below.

Is Equal To
Click on this button to set the condition under which the object will be printed on the ID card. In this instance, the object will print on the ID card only when the field/expression entered above is equal to the contents of the data entry field at the bottom of this dialog box.

For example, if you want to print the object only when the Department field contains the word "*Accounting*," you will click on this radio button and enter the word "*Accounting*" below. Thus, the selected object will only be printed on IDs that are to be issued to members of the Accounting department.

Is Not Equal To
Click on this button to set the condition under which the object will be printed on the ID card. In this instance, the object will print on the ID card only when the field/expression entered above is not equal to the contents of the data entry field at the bottom of this dialog box.

For instance, if you want to print the object only when the **Department** field contains anything except the word "*Accounting*," you would click on this radio button and enter the word "*Accounting*" below. Thus, the selected object will be printed on all IDs except those which are issued to members of the Accounting department.

Expressions
Click on this button to define database expressions for object printing conditions.

Object Properties

1. Double-click on the object using the **Select** tool, or choose **Object Properties** from the **Edit** menu. The **Object Properties** dialog box appears.

   The following options will be available to you:

Conditional Display Options
Conditional display options are available only. For complete information on these settings and what they do, see "*Conditional Display Options*" below.

2. Make whatever option selections are necessary, then choose **OK**.

Conditional Display Options
Conditional display options allow you to print objects on the card design only if certain conditions are met. This allows you to adapt the same card format to meet the identification needs of various departments within your organization.

Always Show Object
Click on this radio button if you want to print the object on all ID cards.

Show Object Only When Field/Expression
Click on this radio button if you want to print the object on specific ID cards. The field beneath this radio button will be enabled. To define the instances in which this object should be printed on the card, click on the arrow to the right of the field. A drop-down list will appear. You may scroll through and select any of the available data fields.

You must use this option in conjunction with one of the two remaining options described below.

Is Equal To
Click on this button to set the condition under which the object will be printed on the ID card. In this instance, the object will print on the ID card only when the field/expression entered above is equal to the contents of the data entry field at the bottom of this dialog box.

For instance, if you want to print the object only when the **Department** field contains the word "Accounting," you would click on this radio button and enter the word "*Accounting*" below. Thus, the selected object will only be printed on IDs that are to be issued to members of the Accounting department.

Is Not Equal To
Click on this button to set the condition under which the object will be printed on the ID card. In this instance, the object will print on the ID card only when the field/expression entered above is not equal to the contents of the data entry field at the bottom of this dialog box.

For instance, if you want to print the object only when the **Department** field contains anything except the word "*Accounting*," you would click on this radio button and enter the word "*Accounting*" below. Thus, the selected object will be printed on all IDs except those which are issued to members of the Accounting department.

Expressions
Click on this button to define database expressions for object printing conditions.

Selecting Colors

To select colors using the **Attribute Bar** Lists:

1. Select the object.

2a. If you want to change the line color, select any of the sixteen quick-access colors from the **Line Color** pick list in the **Attribute** Bar.

2b. If you want to change the fill color, select any of the sixteen quick-access colors from the **Fill Color** pick list in the **Attribute** Bar.

2c. If you want to change the text color, select any of the sixteen quick-access colors from the **Text Color** pick list in the **Attribute** Bar.

To Select Colors Using the Color Dialog Box

The **Color** dialog box offers a wide range of colors for immediate selection. The number available to you depends on your display setting in the **Windows Display**® control panel.

1. Select the object.

2a. If you want to change the **LINE COLOR**, choose the **Line Color** command from the **Object** menu.

2b. If you want to change the **FILL COLOR**, choose the **Fill Color** command from the **Object** menu.

2c. If you want to change the **TEXT COLOR**, choose the **Text Color** command from the **Object** menu.

3. In the **Color** dialog box, select the chosen color from the palette by clicking it with the left mouse button.

4. Click **OK**.

Creating Your Own Colors

To Create Your Own Colors

You can create your own colors and apply them to screen elements.

1. In the **Object** menu, choose either the **Line Color**, **Fill Color** or **Text Color** commands. The Color dialog box will be displayed.
2. Choose the **Define Custom Colors** button.
3. Drag the cursor in the color refiner box, and the arrow beside the luminosity bar, to define your color. You can also create a color by typing numbers in the **Red**, **Green,** and **Blue** boxes, or in the **Hue**, **Sat** (saturation), and **Lum** (luminosity) boxes. Click the up and down arrows to change the numbers by using a mouse.

⇨**NOTE**	The color you create is shown in the left side of the **Color/Solid** box. You can double-click the right side of the box, or press **ALT+O**, to use the solid color that most closely resembles the one you have created.

4. In the **Custom Colors** palette, select an empty box for the new color, or select a color that you want to change.
5. Choose the **Add to Custom Colors** button.
6. Create any other colors you want, and add them to the palette.
7. Click **OK**.

Placing Objects on the K and O Planes

Design Layout for Windows supports 24-bit color, with output process colors in the following models: **CMY** (cyan, magenta and yellow), **CMYO** (CMY plus a protective overlay); **CMYK** (CMY plus pure black), and **CMYKO** (CMYK plus a protective overlay). Each color is considered a "plane."

CMYK

For **CMYK**, ribbon-based ID card printers will use individual ribbons or ribbon segments for each process color. Some color document printers, like the HP DeskJet 560C, will have a CMY ink cartridge and a pure black (**K**) ink cartridge. As the card is passed through the printer, each plane is applied to the card in such a way that it is combined with the other planes to achieve a desired color. For example, if you were to print process black on a card, the printer would combine 100% of the cyan, magenta and yellow planes to achieve black. By contrast, pure or resin black (which is much richer) is achieved by printing 100% of the **K Plane**.

The Protective Overlay

While the protective overlay (also referred to as the overcoat) is not technically a color, it is treated as such by printers that offer protective overlay printing as an option. Literally, it is a transparent film on a separate ribbon (the **O Plane**) which is applied after the other colors have been printed onto the card. It is used to protect the card from wear and tear.

To Place Objects on the K Plane

1. Click on the object that you want to place on the **K** plane using the **Select** tool.
2. Click the **K Plane** button.

⇨**NOTE** This option is only valid if your card printer supports K plane printing.

To Place Objects on the O Plane

1. Click on the **Select** button, or choose the **Select** command from the **Draw** menu.
2. Click on the object that you want to place on the **O Plane**.
3. Click on the **Overlay** button.

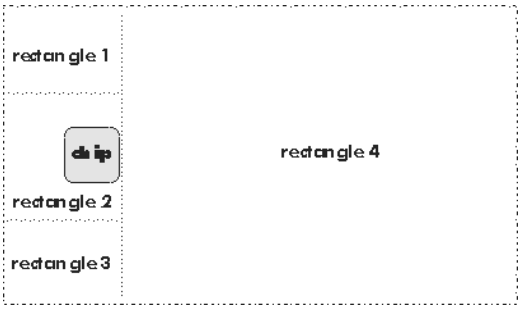
⇨**NOTE** This option will only work with certain printers. Please consult your printer documentation for further details.

In general, applying protective overlays is a simple task when printing ordinary ID cards. It becomes more complicated, however, when you apply them to cards that have embedded smart chips.

By default, a protective overlay will be applied across the entire surface of every card, unless you place a single card design object on the **O Plane**. In this case, the default is overridden and the protective overlay is applied only to the specified object. As you might imagine, the whole-surface overlay default has significant implications when printing ID cards with smart chips, since applying an overlay to a smart chip will render the chip inoperable.

To apply a protective overlay to the surface of an ID card:

- while excluding the portion of the card that is occupied by the smart chip, you will have to draw four rectangles, place each of them on the **O Plane**, and then arrange them on the card as shown below.



It is important to note that the rectangles do not require a fill/line color, or a line weight (i.e., they remain invisible on the editing screen), since **Design Layout** automatically assumes that **O Plane** objects have a 100% solidity. Nevertheless, you should apply the **O Plane** rectangles as your last step in the design process, since adding them will interfere with the layout of your card.

Defining Expressions

While **Design Layout** allows you to define any manner of valid **SQL** expression, it is important to note that you will most likely want to use the **Define Expressions** feature, to combine available database fields (**First_Name** and **Last_Name**, for instance), or to produce a desired output value (such as a specific date format). Please note that you cannot use expressions if your configuration does not access textual data in your database (see "*Adding Static and Dynamic Text*.").

It is impractical to discuss the various **SQL** expressions that can be defined in **Design Layout**, since these differ from database to database. Rather, you should refer to the documentation that accompanies the **ODBC-compliant database** you are using.

To Define Expressions

1. Choose the **Define Expression** command from the **Edit** menu. A **Define Expression** dialog box is displayed.
2. Define your valid **SQL** database expression in the **Database Expression** data entry area. You may add available fields or expressions to your editing area from the **Available Fields/Expressions** pick list by selecting (highlighting) the ones you want and clicking the **Transfer Field/Expression** button (i.e., the button with three stacked arrows).

⇨**NOTE**	When you click the Transfer button or double-click an available field to create an new expression, Design Layout automatically adds square brackets around each field name in the Database Expression data entry area. When you type in field names manually, you will need to add these brackets yourself to avoid an SQL error.

3. Once your expression has been properly defined, press the **Add** button, to add it to the list of available database fields and expressions.
4. Repeat for each expression that you want to define. Choose **Close** when you are finished.

Using Expressions as Dynamic Text Objects

You may select any expression when creating a dynamic text object, just as you would any regular database field. Since an expression can be rather lengthy, you can edit the label so that it more closely resembles the expression's intended purpose (e.g., "*Full Name*").

Refer to "*Adding Static and Dynamic Text*" earlier in this user's guide for details.

Printing Badges

After you have designed a badge using the **Design Layout** feature, you can print your own badges by using a badge-making printer like the Eltron 310.

Connecting the printer and loading the printer driver.

1. Connect the printer to the PC via **LPT-1** (or **LPT 2**).
2. Turn on the P.C. (if necessary). At the **Desktop**, open the **Control Panel** and click on **Printers** icon.

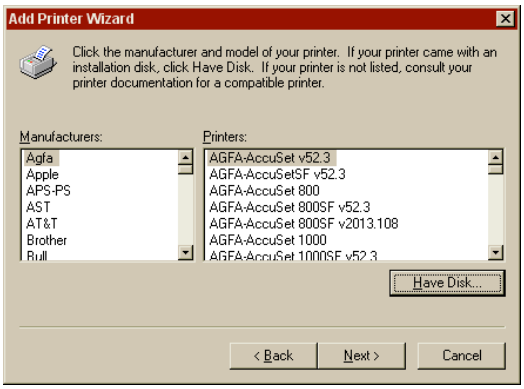
3. Click **Add Printer**. A pop-up screen will appear.

Add Printer Wizard
This wizard helps you install your printer or make printer connections. This printer will be managed by:
My Computer
All settings will be managed and configured on this computer.
Network printer server
Connect to a printer on another machine. All settings for this printer are managed by a print server that has been set up by an administrator.
< Back
Next >
Cancel

4. Select **My Computer**. Click **Next>**.

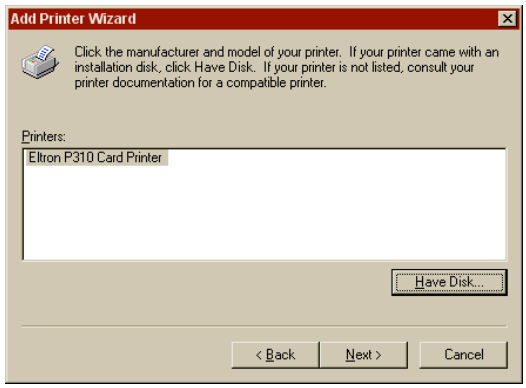
5. The following page asks you to choose the port where the printer is connected (usually LPT 1). Check the correct port and click **Next>**.

6. The next page will ask you for appropriate driver for the new printer (in our case, the Eltron 310). Click on the **Have Disk...** button.

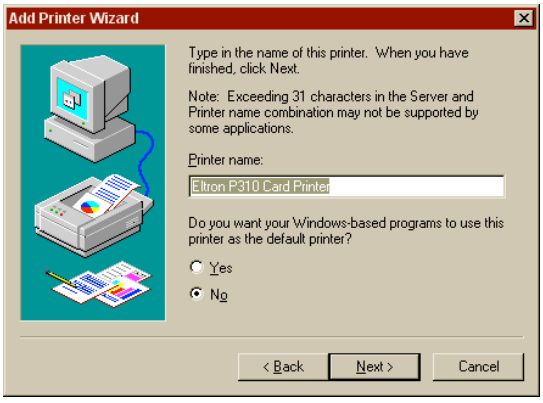


7. A new pop-up window will appear, asking you for the location of the driver (ie. **A:**). Click **Browse...** for the correct file.
8. Once the correct file has been found, click **OK**.

9. The new page will display the driver that is about to be installed. Click the **Next>** icon.

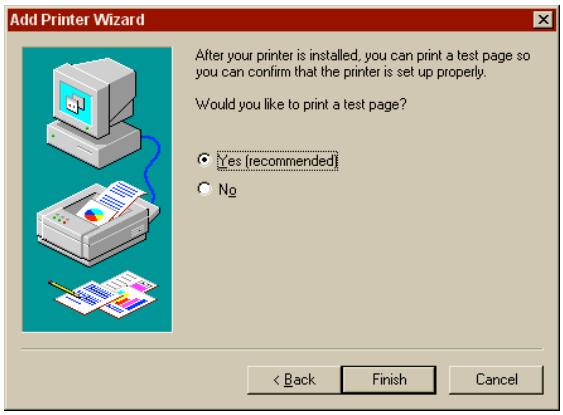

Add Printer Wizard
Click the manufacturer and model of your printer. If your printer came with an installation disk, click Have Disk. If your printer is not listed, consult your printer documentation for a compatible printer.
Printers:
Eltron P310 Card Printer
Have Disk...
< Back
Next >
Cancel

10. The following page will ask you for the name of the printer. It will display a default name that in most cases is sufficient. Below the name option, you will be given the ability to use the new printer as a default printer. If the badge-making printer is the only one that is going to be used, click **Yes**. If not, then click **No.** Click on the **Next>** to continue.


Add Printer Wizard
Type in the name of this printer. When you have finished, click Next.
Note: Exceeding 31 characters in the Server and Printer name combination may not be supported by some applications.
Printer name:
Eltron P310 Card Printer
Do you want your Windows-based programs to use this printer as the default printer?
Yes
No
< Back
Next >
Cancel

11. The next page will ask you if the printer is to be shared between more than one computer. In nearly all cases the printer won't be shared by more than one computer. Click **Not Shared** and then click the **Next>** button.

12. The next page will ask you to print a test page. Click **Yes** and then the **Finish** button. The printer should now be properly installed on your PC.

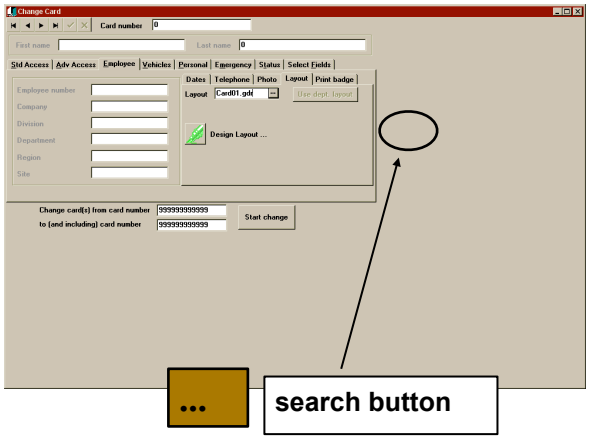

Add Printer Wizard
After your printer is installed, you can print a test page so you can confirm that the printer is set up properly.
Would you like to print a test page?
Yes (recommended)
No
< Back
Finish
Cancel

⇨**NOTE** LiNC-NET must be restarted in order for the change-printer-type to take effect..

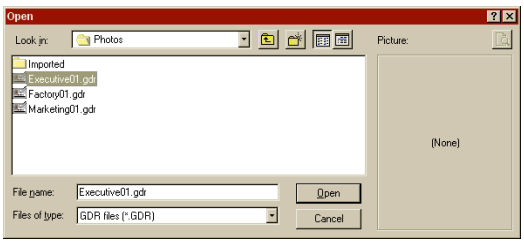
Printing Badges using LiNC-ID

Printing One Card

1. Start **LiNC-NET** and open the **Change Card** page and **Employee** tab. In the **Employee** tab, select the sub-tab **Layout**. This page will appear.



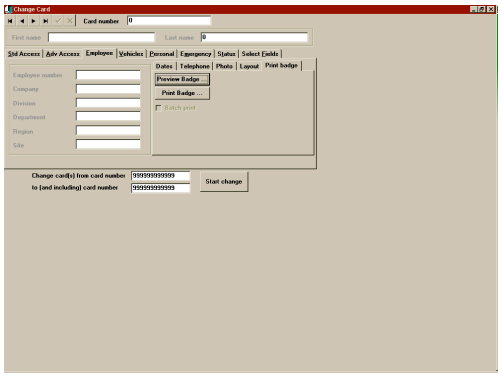
2. In the **Layout** entry box, clicking on the box with the cursor will bring up the search box. By clicking on the search box, a pop-up **Open**



window will display the design layout that you have created using the **Page Layout** feature. In this case, we are selecting the **Executive01.gdr** file. Click **Open** to select that file for use in badge creation.

⇨**NOTE** The GDR file extension will not be displayed in the preview picture screen

3. You'll see that the **Executive01.gdr** file has been selected for use in badge making. If you need to change the file, clicking on the **Design Layout** button will bring up the **Executive01.gdr** file for any alterations. If you don't need to make any changes to the file, click on the **Print Badge** sub-tab. You will see the following screen.



4. Clicking on the **Preview Badge . . .** button will bring up the **Print Preview** window. Select the badge-making printer (in our case, the Eltron P310 Card Printer) and click **OK**. Another pop-up window will display soon-to-be printed card. When done, click the **X** button to return the **Print Badge** menu.

5. Clicking on the **Print Badge . . .** button will bring up the **Print** window. Select the badge-making printer and click **OK**.

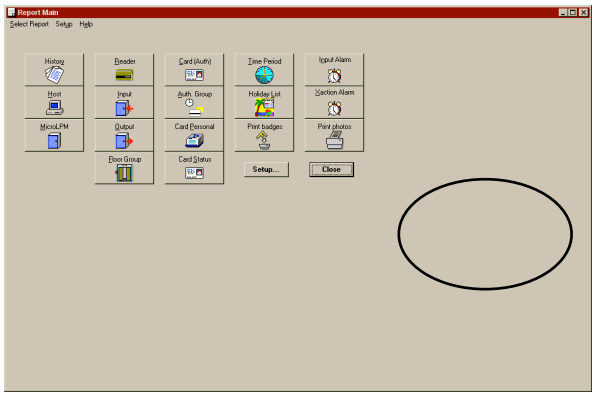
Batch Printing

There are cases where you may wish to print out several cards at once as instead of one at a time (ie. if you are only connected to a printer for a short period of time). In those cases, you can check the **Print batch...**box, which will save the file to print later with as many others that you might select.

However, you can't print a batch of cards from the **Change Card** page in the **System** menu.

1. After saving several files to print in a batch (by checking the **Print batch...** box for each card), click on the **Reports** icon.

2. Once in the **Reports** menu, click on the **Print Badges** button.

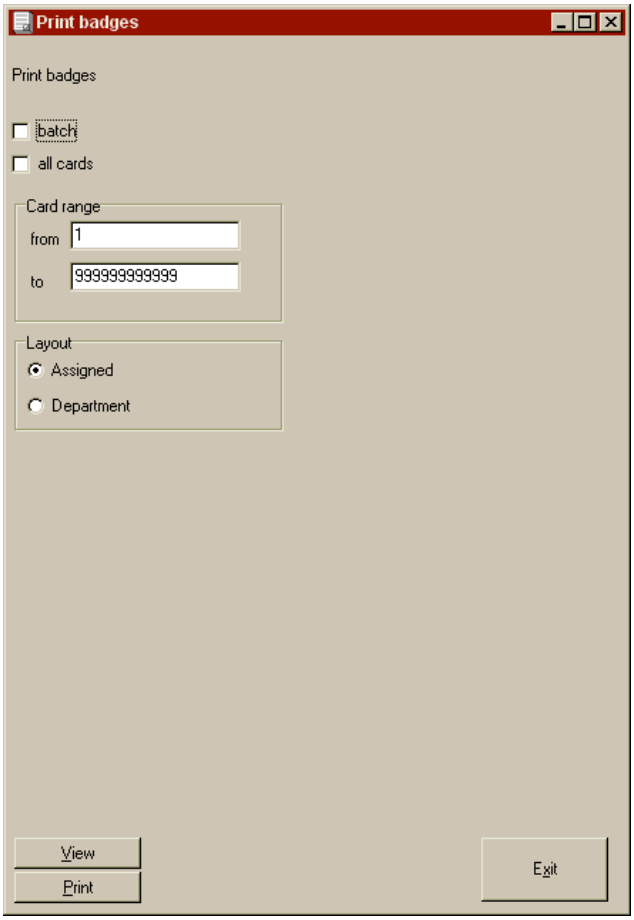


3. In the **Reports: Print badges** page, check the **batch** box.

4. Enter the range of card numbers **from** and **to** select layout type.

5. Click on the **Print** button, and all the batch-selected cards will print out together.

6. When the batch has finished printing, click on the **Exit** button to return to the **Report** menu.



Using LiNC-ID in Access Control

Phototrace and Solicit Open

You can select that each reader can register either the **Phototrace** or **Solicit Open** option using the pictures that are stored using the employee images collected. Since LiNC-NET is designed to allow an operator to monitor specific areas of your access control system, you can select certain readers to function with **Phototrace** or **Solicit Open**.

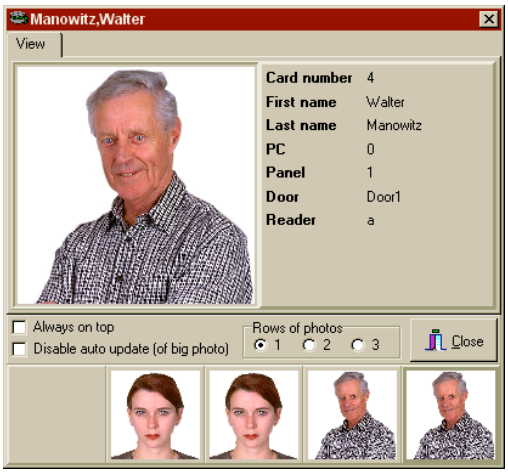
Phototrace

Phototrace allows the picture of an employee to appear in the logger file as their card is swiped through a **Phototrace**-enabled reader. It does not allow any control over an employee's access ability, but keeps a visual record of users at a particular reader.

A visual record of up to 15 previous users (3 rows of photos) can be seen at any one time

Solicit Open

Solicit Open functions as an enhanced version of **Phototrace**. **Solicit Open** produces a picture of any employee attempting to gain access. However, **Solicit Open** gives the LiNC-NET user the option of granting access to those individuals who would normally be denied (ie. wrong authorization group, attempting access outside normal hours).



Solicit Open – Normal Access

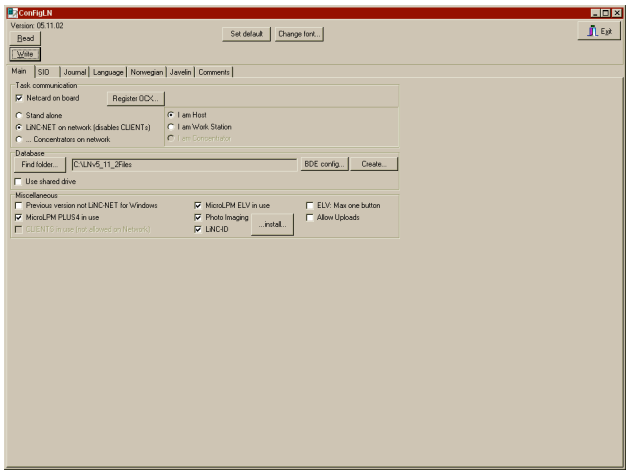
Solicit Open – Denied Access

Setting Up Phototrace and Solicit Open

ConFigLN Setup-

1. Open **ConFigLN**, and in the **Miscellaneous** section check the box next to **Photo Imaging**.

2. Click on the **Write** button (upper left-hand corner).

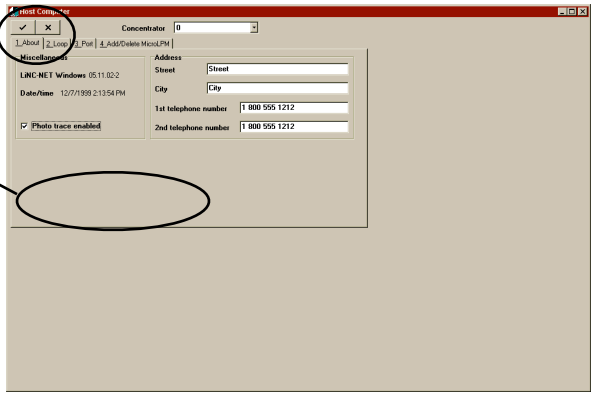


LiNC-NET System Setup-

1. Open **LiNC-NET System Menu** and open the **Host Computer** page.

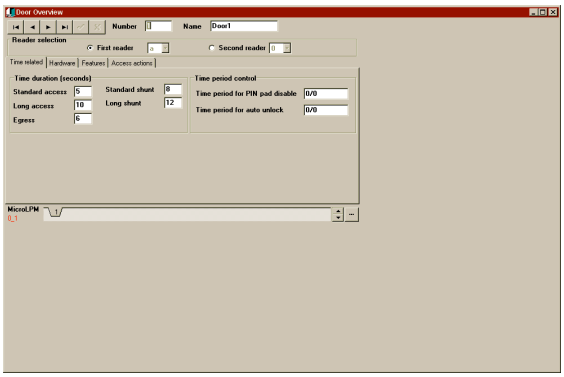
2. In the (default) **About** tab, check on the box next to **Photo trace enabled**.

3. Click on the **Checkmark** box (top left-hand corner) to save changes.

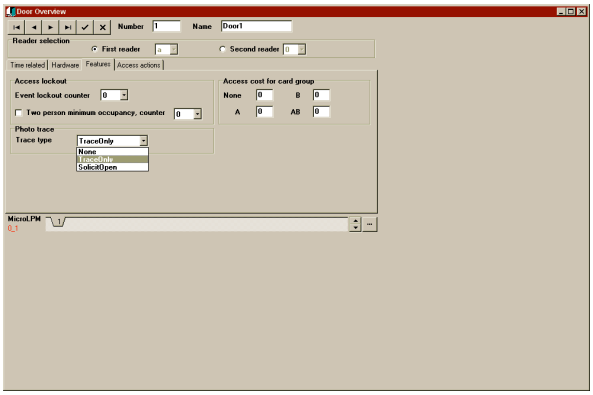


Reader Setup

4. Go the **Door Overview** page.



5. Click to the **Features** tab, in the **Photo trace** section.



6. Select the reader that you wish to have exhibit either **Phototrace** or **Solicit Open.**

7. Click on the **Trace Type** box where you will have three options:

None no extra features

TraceOnly only Phototrace

SolicitOpen Solicit Open feature

8. Once you have selected which feature that you wish to exhibit on a reader, click on the **Checkmark** in the upper left-hand corner to save changes.

End of LiNC-ID
Part# 33-10038-001
April 2000